

OFFICIAL AGENTS FOR THE SALE OF GOVERNMENT PUBLICATIONS.

In India.

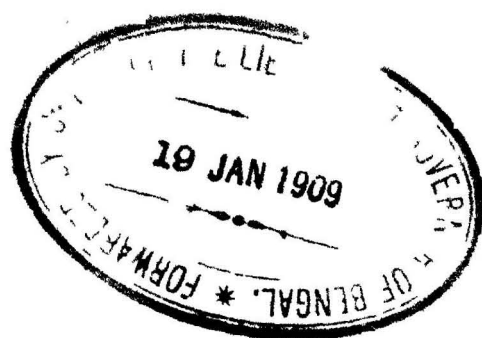
Messrs. THACKER, SPIKE & Co., Calcutta and Simla.
Messrs. NEWMAN & Co., Calcutta
Messrs. HIGGINSOTHAM & Co., Madras
Messrs. THACKER & Co., Ltd., Bombay.
Messrs. A. J. COMBRIDGE & Co., Bombay.
THE SUPERINTENDENT, AMERICAN BAPTIST MISSION PRESS,
 Rangoon.
Mrs. RADHARAI ATMARAM SAGOON, Bombay.
Messrs. R. CAMBRAY & Co., Calcutta.
RAI SAHIB M. GULAB SINGH & SONS, Proprietors of the Mufid-i-am
 Press, Lahore, Punjab.
Messrs. THOMPSON & Co., Madras.
Messrs. S. MURTHY & Co., Madras.
Messrs. GOPAL NARAYAN & Co., Bombay.
Messrs. B. BANERJEE & Co., 20, Cornwallis Street, Calcutta.
Messrs. S. K. LAHIRI & Co., Printers and Booksellers, College
 Street, Calcutta.
Messrs. V. KALYANARAMA IYER & Co., Booksellers, &c., Madras.
Messrs. D. B. TARAPOREVALA, SONS & Co., Booksellers, Bombay.
Messrs. G. A. NATHAN & Co., Madras
Mr. N. B. MATHUR, Superintendent, Nazair Kanum Hind Press,
 Allahabad.
THE CALCUTTA SCHOOL BOOK SOCIETY.
Mr. SUNDER PANDURANG, Bombay.
Messrs. A. M. AND J. FERGUSON, Ceylon.
Messrs. TEMPLE & Co., Madras.
Messrs. COMBRIDGE & Co., Madras.
Messrs. A. R. PILLAI & Co., Trivandrum.
Messrs. A. CHAND & Co., Punjab.

In England.

Mr. K. A. ARNOLD, 41 & 43 Maddox Street, Bond Street,
 London, W.
Messrs. CONSTABLE & Co., 10 Orange Street, Leicester Square,
 London, W. C.
Messrs. GRINDLAY & Co., 64 Parliament Street, London, S. W.
Messrs. KEGAN PAUL, TRENCH, TRUBNER & Co., 49 Gerrard
 Street, Soho, London, W.
Mr. B. QUARITCH, 11 Grafton Street, New Bond Street,
 London, W.
Messrs. W. THACKER & Co., 3 Creed Lane, London, E. C.
Messrs. P. S. KING & SON, 2 & 4 Great Smith Street,
 Westminster, London, S. W.
Messrs. H. S. KING & Co., 66 Cornhill, London, E. C.
Mr. B. H. BLACKWELL, 60-61 Broad Street, Oxford.
Messrs. DEIGHTON BELL & Co., Cambridge.
Mr. T. FISHER UNWIN, 1 Adelphi Terrace, London, W. C.
Messrs. LUCAS & Co., 46, Great Russell Street, London, W. C.

On the Continent.

Mr. R. FRIEDLÄNDER & SOHN, Berlin, N. W. Carlstrasse, 11.
Mr. HARRASSOWITZ, Leipzig.
Mr. W. LUTZ, 1 Dorrienstrasse, Leipzig (Germany).
 ——— Leipzig.
 ——— Paris.



BENGAL DISTRICT GAZETTEERS.

—♦—
KHULNA.

BENGAL DISTRICT GAZETTEERS

KHULNA.

BY
L. S. S. O'MALLEY,
INDIAN CIVIL SERVICE.



CALCUTTA:
THE BENGAL SECRETARIAT BOOK DEP^t

1908.

PLAN OF CONTENTS.

CHAPTERS	—	PAGES
I. PHYSICAL ASPECTS		1—24
II. HISTORY		25—52
III. THE PEOPLE		53—73
IV. PUBLIC HEALTH		74—81
V. FORESTS		82—88
VI. AGRICULTURE		89—101
VII. NATURAL CALAMITIES		102—107
VIII. RENTS, WAGES AND PRICES		108—113
IX. OCCUPATIONS, MANUFACTURES AND TRADE		114—126
X. MEANS OF COMMUNICATION		127—133
XI. LAND REVENUE ADMINISTRATION		134—148
XII. GENERAL ADMINISTRATION		149—154
XIII. LOCAL SELF-GOVERNMENT		155—157
XIV. EDUCATION		158—161
XV. GAZETTEER		1—199
INDEX		

TABLE OF CONTENTS.

CHAPTER I.

PHYSICAL ASPECTS.

	PAGES.
GENERAL DESCRIPTION—Boundaries—Natural configuration—Natural divisions—General conditions—RIVER SYSTEM—Jamunā—Ichhāmātī—Sonai—Kaukeiālī—Kūlindī—Kholpetua—Betna—Gaighasiā—Sobnālī—Kabadak—Bhairab—Athārabānkū—Kuppa—Bhadra—Madhumatī—Cross-channels—Sundarbans rivers—ESTUARIES—Raimangul—Mulanchū—Marjatā—Harin-ghātā—LAKES AND MARSHES—GEOLOGY—BOTANY—FAUNA—Birds—Crocodiles—Fish—CLIMATE—Barisal guns—Rainfall	1—24

CHAPTER II.

HISTORY.

PREHISTORIC PERIOD—KHAN JAHAN—KHALIATABAD—PRATAPADITYA—Legendary account—Historical references—Jesuit accounts—THE BARAH BUCIYAS—MUGHAL RULE—MAGH RAIDS—EARLY BRITISH ADMINISTRATION—Sundarbans reclamation—Subdivisional administration—Police administration—Revenue administration—Salt Department—SONDARBANS ADMINISTRATION—Early surveys—Legislation—Mortellganj—FORMATION OF THE DISTRICT—ARCHAEOLOGY	25—52
---	-------

CHAPTER III.

THE PEOPLE.

GROWTH OF POPULATION—CENSUS OF 1901—GENERAL CHARACTERISTICS—Density of population—Migration—Towns and villages—Language—RELIGIONS—Muhammadans—Hindus—Christians—Some popular beliefs—Jwara Nārāyan and Sitalā—Exorcism of wild animals—Adoration of Ites—MUHAMMADAN CLASSES—Ashrūf and Atrūf—HINDU CASTES—Chandāls and Pods—Kūyasths—Kaibartīs—Brāhmins—Baidyas—Pirāls—SOCIAL CHARACTERISTICS—Food—Clothing—Houses—Amusements—Festivals	53—78
---	-------

CHAPTER IV.

PUBLIC HEALTH.

GENERAL CONDITIONS—VITAL STATISTICS—PRINCIPAL DISEASES—Fever—Cholera—Other diseases and infirmities—VACCINATION—MEDICAL INSTITUTIONS	
--	--

CHAPTER V.

FORESTS.

	PAGES
GENERAL DESCRIPTION—HISTORY—MANAGEMENT—MARKETS	82—88

CHAPTER VI.

AGRICULTURE.

GENERAL CONDITIONS—Tracts of fertility—SUNDARBANS RECLAMATION— Seasons of cultivation—Embankments—RAINFALL—SOIL—PRINCIPAL CROPS—Rice—Amar—Jute—Boro—Uri dhau—Other cereals and pulses —Oil-seeds—Jute—Tobacco and sugarcane—Date palm cultivation— —Betelnut and coconut trees—FRUITS AND GARDEN PRODUCE—EXTEN- SION OF CULTIVATION—IMPROVEMENT OF METHODS—CATTLE— Pasturage—Veterinary assistance	89—101
---	---------------

CHAPTER VII

NATURAL CALAMITIES.

FAMINES—FAMINE OF 1897—FLOODS—CYCLONES	102—107
---	----------------

CHAPTER VIII

RENTS, WAGES AND PRICES

RENTS—Produce rents—WAGES—PRICES—MATERIAL CONDITION OF THE PEOPLE	. 108—113
--	------------------

CHAPTER IX.

OCCUPATIONS, MANUFACTURES AND TRADE.

OCCUPATIONS—MANUFACTURES—Sugar manufacture—Dated sugar—Pak sugar—Fisheries—Methods of capture—Fish preserving—Wood-cutting —Boat-building—Other industries—TRADE—Trading classes—Loan companies—Trade centres—Hubs—Trade routes	. 114—126
--	------------------

CHAPTER X.

MEANS OF COMMUNICATION.

CONDITIONS—WATER COMMUNICATIONS—Calcutta and Eastern Principal routes—Boat Routes—Steamer services—RAILWAYS— OSTAL COMMUNICATIONS	127—133
--	----------------

CHAPTER XI.

LAND REVENUE ADMINISTRATION

PAGES

REVENUE HISTORY—Mughal rule—EARLY BRITISH ADMINISTRATION— PERMANENT SETTLEMENT—RESUMPTION PROCEEDINGS—SUNDARBANS ADMINISTRATION—Rules of 1853—Large capitalist rules—Small capitalist rules—ESTATES—TENURES— <i>Gāntīs</i> — <i>Tālūks</i> and <i>havelīs</i> — <i>Patni</i> <i>tālūks</i> —RENT-FREE AND SERVICE LANDS—RYOTS .	134—148
---	---------

CHAPTER XII.

GENERAL ADMINISTRATION.

ADMINISTRATIVE CHARGES AND STAFF—REVENUE—Land revenue—Stamps —Cesses—Excise—Income-tax—Registration—ADMINISTRATION OF JUS- TICE—Civil justice—Criminal justice—Crime—POLICE—SALT DEPAR- TMENT—JAILS	149—154
--	---------

CHAPTER XIII.

LOCAL SELF-GOVERNMENT.

DISTRICT BOARD—LOCAL BOARDS—UNION COMMITTEES—MUNICIPALITIES— Khulnā—Sātkhīrā—Debbāī	155—157
--	---------

CHAPTER XIV.

EDUCATION.

PROGRESS OF EDUCATION—COLLEGIATE EDUCATION—SECONDARY EDUCATION —PRIMARY EDUCATION—FEMALE EDUCATION—TECHNICAL EDUCATION —TRAINING SCHOOLS—OTHER SCHOOLS—MUHAMMADAN EDUCATION— LIBRARIES AND NEWSPAPERS	158—161
--	---------

CHAPTER XV.

GAZETTEER.

Alāipur—Amadi—Asāsun—Bāgherbhāt—Bāgherbhāt subdivision—Bardal— Chāndkhālī—Chitalmāri—Chuknagar—Damrai—Daulatpur—Debbāī— Dhūmghāt—Dumriā or Dumuriā—Fakirhāt—Gopālpur—Iswaripur— Jātrāpur—Kāchūā—Kālāroā—Kālīganj—Kapilmuni—Katipārā—Khulnā —Khulnā subdivision—Labā—Mīgurā—Mansā—Masjiddur—Mollāhāt— Morrellganj—Nawapūrā Manighar—Pāikgāchā—Pātkoighātā—Phultulā— Rāmpāl—Raiyadpur Trust Estate—Sātkhīrā—Sātkhīrā subdivision— Sambhāt—Sunderbans—Swatch of no ground—Tālā	162—199
--	---------

GAZETTEER

OF THE

KHULNA DISTRICT.

CHAPTER I.

PHYSICAL ASPECTS.

THE district of Khulnā, which forms the extreme south-eastern portion of the Presidency Division and of the Province of Bengal, is situated between $21^{\circ} 38'$ and $23^{\circ} 1'$ north latitude, and between $88^{\circ} 54'$ and $89^{\circ} 58'$ east longitude. It extends over an area of 4,765 square miles, including 2,688 square miles in the Sundarbans, and has a population, according to the census of 1901, of 1,253,043 persons. The principal town and administrative headquarters is Khulnā, situated on the Bhairab in $22^{\circ} 49' N.$ and $89^{\circ} 34' E.$ According to local tradition, the town is so called after Khullanā, a heroine of Hindu mythology, who dedicated to the goddess Kālī a shrine, called the temple of Khullaneswari, on the bank of the river Bhairab about a mile to the east of the present town of Khulnā.

The district resembles, in shape, an irregular parallelogram. It is bounded on the north by the district of Jessore, on the east by Backergunge and Faridpur, on the south by the Bay of Bengal, and on the west by the 24-Parganas.

Taken as a whole, Khulnā is a low-lying fen country, occupying the central portion of the southern delta between the Hooghly and the Meghna estuary, and intersected by a large number of rivers and estuaries, which again are connected by innumerable interlacing cross-channels. Its physical features are much the same as those of other deltaic districts. The country is flat, the surface being only slightly raised above flood-level; the banks of the rivers are higher than the adjacent land, so that the land sloping away from them on either side forms a series of depressions between their courses; and there are numerous marshes. The villages cluster along the banks of the rivers, but large

GENERAL
DESCRIP-
TION.

Bounda-
ries.

Natural
configura-
tion.

tracts are swampy, and the people who cultivate them are obliged to reside elsewhere.

Away from the villages the appearance of the country is that of a vast plain covered with rice, reed and rush, and broken here and there by clumps or lines of low trees fringing the banks of the streams. The river banks are high and have a prosperous appearance, but in the interior, where the lands are lower, the villages are poor and scanty. Rice grows in abundance, but in some places, where the *bils* or marshes do not dry up at any time in the year, there are extensive areas without a vestige of cultivation. The southern portion of the district exhibits the delta in a less advanced state of growth, covered with swamps and ending towards the coast in a network of sluggish channels and backwaters. The northern portion of this tract, however, is being fast encroached upon by the pioneers of cultivation, and the forest is being replaced by smiling rice fields.

Further to the south, lie the Sunderbans, a desolate tract only 12 to 30 inches above high tide level, in which the slow process of land-making has not yet ceased. This tract is intersected throughout by large rivers and estuaries running from north to south. These are connected with each other by an intricate series of branches, and the latter in their turn by innumerable smaller channels, so that the whole tract is a maze of waterways enclosing a large number of islands of various shapes and sizes. Approaching the sea, the general level of the surface rises very gradually, until, reaching the outer islands, it is above ordinary high tide level. This is caused by the silt, which, during the south-west monsoon, and especially during the months of May and October, is deposited by the heavy swell, which, coming in from the Bay of Bengal, flows for several miles inland, and floods the most exposed islands.

Natural
divisions.

Though the general appearance of the district is that of a low alluvial plain, it may, for practical purposes, be divided into four parts. In the north-western portion the land is well raised, and is ordinarily above flood-level. Its population is fairly dense, and the surface is diversified by groves of date palms and plantations of mango and other trees on the outskirts of the villages:—indeed, nearly every village is surrounded by a fringe of orchards.

• In the north-eastern portion, from the boundary line between Jessore and Khulna down to the latitude of Bagherhat, the land is low and covered with swamps, the population is sparse, and the only places suitable for dwellings are the high lands along the banks of the rivers. The river Jamuna, with its continuation,

the Kalindi, and the Kholpetua and Kabadak, with their tributaries, all traverse this part of country and debouch into the Bay of Bengal, with numerous tortuous waterways as connecting links between them. From December to the end of June, the river water, as a rule, remains brackish, but after the rains have set in, the salt water is usually driven beyond the limits of cultivation by the volume of the fresh rain water and drainage coming down. The river banks are almost invariably higher than the land they enclose, and are cut up by numerous little inlets, by which the water penetrates to the lands within.

The central portion is also low-lying, but has now been brought under habitation and cultivation, groves of betel-nut and tanks being abundant. Towards the south, where this tract begins to merge in the Sundarbans, are the clearances made by the pioneers of cultivation. Here there are few or no villages, properly speaking; that which is marked in the map as a village is perhaps only an expanse of rich rice land, with a few cultivators' houses scattered here and there. Everything is subordinated to rice cultivation, so that hardly a tree is left, and people live, not in villages, but far apart among their rice-fields. Sluggish creeks (*khāls*) and rivers wind about among the rice clearings, and their course can be traced by the fringe of brushwood that lines their banks.

Further south, nearer the sea, is the Sundarbans tract, a region of morasses and swampy islands, most of which are clothed with a dense evergreen forest, while some are covered with salt water at flood tide.

When this part of Bengal was surveyed by Major Rennell General conditions. between 1764 and 1772, the banks of two of the oldest rivers, the Kabadak and the Bhairab, appear to have been the only habitable tracts above the general level of the swamps west of the Baleswar. That the latter have recently been raised by natural action, admits of no doubt, for, during the time which has since elapsed, the banks of numerous other streams and creeks intersecting the swamps and connected with the principal distributaries of the Ganges have been gradually raised, with the assistance of human industry, above the general level of the marshes, and are now bordered by villages and hamlets. A comparison of Rennell's map with that made nearly a century later in the course of the revenue survey of 1858-64, will show that cultivation and villages now exist where a century ago all was waste. This change is most noticeable over the whole of the old marshy tract west of the Kabadak down to its junction with the Kholpetua.

At the same time, ancient ruins discovered from time to time in making new settlements seem to shew that portions of the district which are now being reclaimed were formerly inhabited. Various theories, such as the inroads of pirates, the devastation caused by cyclones, and the inrush of irresistible storm-waves, have been put forward to account for the extinction of the villages and the abandonment of the land. A more reasonable explanation has been suggested by Dr. Thomas Oldham, which so clearly illustrates the general physical aspects of this deltaic tract that it may be quoted at length.

"I suppose no one will hesitate to acknowledge that the whole of the country, including the Sundarban proper, lying between the Hooghly on the west and the Meghnā on the east, is only the delta caused by the deposition of the debris carried down by the rivers Ganges and Brahmaputra, and their tributaries. It is also equally well known that in such flats the streams are constantly altering their courses, eating away on one bank and depositing on the other, until the channel in which they formerly flowed becomes choked up, and the water is compelled to seek another course. It is also certain that in this peculiar delta the general course of the main waters of the Ganges has gradually tracked from the west towards the east until of late years the larger body of the waters of the Ganges have united with those of the Brahmaputra and have together proceeded to the sea as the Meghnā. Every stream, whether large or small, flowing through such a flat, tends to raise its own bed or channel, by the deposition of the silt and sand it holds suspended in its waters, and by this gradual deposition the channel bed of the stream is raised above the actual level of the adjoining flats. It is impossible to suppose a river continuing to flow along the top of a raised bank, if not compelled to do so by artificial means, and the consequence of this filling in and raising of its bed is that, at the first opportunity, the stream necessarily abandons its original course, and seeks a new channel in the lower ground adjoining, until after successive changes it has gradually wandered over the whole flat and raised the entire surface to the same general level. The same process is then repeated, new channels are cut out, and new deposits formed.

"Bearing these admitted principles in mind, look to the delta of the Ganges and Brahmaputra. The Ganges river emerging from its upper levels round the Rājmahal Hills, and prevented by their solid rocky barrier from cutting further to the west, sought its channel in the lower ground adjoining, and originally the main body of its waters flowed along the general

course now indicated by the Bhāgirathi and Hooghly. But gradually filling up this channel, it was again compelled to seek a new course in the lower, because as yet comparatively unfilled-in, ground lying to the east. And, the same process being repeated, it wandered successively from the rocky western limit of the delta-flat towards the eastern. If this progress eastwards was allowed to be sufficiently slow to admit of the gradual filling in of the country adjoining, the delta was formed continuously up to the same general level, and the larger streams or channels passing through the flat to the sea became unavoidably diminished in size, and in the quantity and force of the water they carried, the main body passing around further to the east, and having its course in the channels successively formed there. I need not here point out the successive stages in the formation of the delta, or shew how these have been exactly paralleled by similar changes in the course and deposits of the Brahmaputra and the other rivers which unite with the Ganges. We are at present concerned rather with the results arising from these changes as affecting the existence and distribution of population.

"The very first necessity for the existence of man is the presence of drinkable sweet water. Where this cannot be procured, it is certain that man can make no settlement, and it is equally certain that the removal or destruction of the sources of supply of this necessary element of existence will compel him to abandon his abode, and change his habitation. We have not to go beyond the delta of the Ganges itself to see the application of these facts in explanation of the former history of the Sundarban. The more modern courses of the large rivers give us a patent illustration of the successive conditions of all. To the east where now the great body of the waters of these rivers is discharged, we find the force of the fresh water sufficient to overcome the strength of the tide, and the influx of salt water from the sea. And down to the very mouths of the rivers here, fresh water (often for hours in the day flowing over a basis of salt water beneath) can readily be procured. The consequence is that towns and villages line the banks of every stream, and population and cultivation follow the course of this, the prime element of their existence. To the east, as we have said, the filling in of the delta has not yet reached the same level as to the west, and the fresh waters here retain sufficient power, therefore, to be carried down to the sea. In earlier times, precisely similar conditions must have existed further to the west; the larger portion of the river waters found their exit through the channels there, and were thus in sufficient force to be carried

down to the very sea; and the natural consequence of this was that man fixed his abode where he could procure fresh water, towns and cities arose, and taking advantage of the great facilities for trade offered by their position, increased in importance and number, until the necessary changes in the course of the streams which supplied them deprived them of the possibility of existence. That this is the natural interpretation of the facts, appears to me abundantly evidenced by the circumstance that within this abandoned tract and in its vicinity, at the present day, when the swarming population is seeking utility for settlement in every direction, not a single spot finds its settler, save where fresh water is to be had, and the traveller may go for days or weeks through the countless anastomosing creeks and channels of the tidal Sunderban, without finding a single abode, whereas the moment he reaches any spot where fresh water is obtainable, he finds cultivation spreading and the population increasing . . .

"I feel convinced, therefore, that there is no necessity to resort to any fancied effects of cyclone-waves of the inroads of pirates, or the persecution of other peoples, to account for the occurrence at the present time of ruins in the Sunderban. Cyclone-waves and persecution and robbery do not drive men from their abodes near the sea-b and now, though they may cause vast destruction of property and produce great suffering. Nor would these causes, as I believe, have sufficed in earlier times to produce the same result. Doubtless they may have diminished the pang with which the settler abandoned the homes in which his family had grown round him, but unless combined with the far more general and more unavoidable compulsion of the want of water, I believe that, however they may have affected individuals, they would have been powerless to induce communities to abandon positions favourable for trade, and for the acquirement of wealth."

This theory may be confirmed by a concrete instance, that of the village of Gobrá on the Kabadak. According to tradition, cultivation once extended along the eastern bank of the river far below Gobrá, and in its neighbourhood Colonel Gastrell found ruins of masonry buildings, traces of old courtyards and some garden plants or shrubs. Regarding these remains he writes :— "By whom the buildings were erected, or when inhabited, no one seems to know. In those days, probably, the Kabadak communicated at all seasons of the year directly with the Ganges; its water would then have been fresh instead of brackish, as it is at present; and there would have been every

prospect, also, of its banks being still further raised and consolidated. The temptations, therefore, held out to men to extend cultivation in that direction must have been as great as they are at present on the banks of the other fresh water rivers of the delta. But long before Rennell's day other streams had interfered with and cut off the Kabadak from the Ganges, and left it what it now is, a mere tidal creek with no headway of fresh water. Fresh deposit on its banks must then have ceased to a great extent; the rains would gradually have washed away the upper stratum of soil, and lowered the general level; the place would soon have become sickly, and finally forsaken by all but those whom dire necessity kept chained to the spot. Of all the villages that may once have existed over this portion of the district, the miserable village of Gobrā alone remains. The area of this village has also decreased, and the cultivation of rice does not extend to within two miles of where it once did. The soil is gradually becoming more and more impregnated with salt and unfit for crops; and were it not for embankments, and the fresh water that drains into and passes down the Kabadak in the rains helping to wash out the salt of the soil near the banks, Gobrā would soon be deserted also."

Four great rivers, connected by numerous cross channels and known by a confusing multiplicity of names in different portions of their courses, gradually find their way through the district by a southerly route to the sea. On the extreme west is the Jamunā flowing from north to south, and further to the east the Kabadak runs almost parallel to it. The Bhairab and its continuations traverse the centre of the district, while the eastern boundary is formed by the Madhumati. In the south there is a labyrinth of rivers, all tending, however, towards a number of outlets, such as the Raimangal, Mālanchā, Marjātā and Harin-ghātā, each of which is large enough to be called an arm of the sea. The other rivers of the district are, with few exceptions, branches of the rivers mentioned above. RIVER SYSTEM.

Between the larger rivers and estuaries, are numerous streams and watercourses, called *khaṭs*, forming a perfect network of channels, and ending ultimately in little creeks, which serve to drain off the water from the depressions between the larger rivers. Each of these depressions being shaped like a basin, with high ground along the banks of the waterways surrounding it, water accumulates in them and is drained off by a small *khaṭ* into the larger *khaṭs*, and ultimately into the rivers. Conversely, when the water swells in the rivers, it floods the country through the same channels. Many of

the *khāls* connect two large ones, and consequently the tide flows into them through both ends: such *khāls* are called *dodāya khāls*. They are very useful as affording communication between the larger *khāls*, but have one serious defect in that they are liable to silt up at the point where the two tides meet.

The main rivers entering the district from the north, from the Jamunā on the west to the Madhumati on the east, are offshoots of the Ganges, by which they were originally fed. Owing, however, to the raising of their beds in their upper reaches, the current of the Ganges is deserting them, and is being deflected further and further to the east. The Madhumati alone continues to bring down any great quantity of the Ganges water to the sea, and the other main rivers serve chiefly as lines of drainage to carry off the local surface water. They were at one time great waterways with a good depth of water even in dry seasons, and during the rains carried down a large volume of flood water. But, one by one, their heads have closed up, and the lower reaches have consequently deteriorated. Even as late as 20 or 30 years ago the principal rivers still conveyed fresh water through the district until they entered the Sundarbans, but now there is scarcely a river that does not become brackish in the dry season, and saline water forces its way far inland.

The result is that only in part of the district is the land being elevated by the deposit of the river silt carried in suspension in flood water, viz., to the east, where the Ganges water finds an outlet by the Madhumati and other channels. Elsewhere, this process of land raising is in suspension, as the water-courses now receive no flood water from the Ganges, and their channels are far too large for their function as receptacles of the local drainage. The very small slope, which is characteristic of the country, tends to cause them to become choked with aquatic vegetation, and to take the form of long canals in which the flow of water is extremely sluggish. It is only the connection with the parent stream, however, which has been closed or silted up, and the channels are quite competent to receive local drainage and convey it to tidal waters. The following is a brief account of the principal rivers proceeding from west to east.

To the extreme west, the Jamunā or Jabunā, flowing southwards from Jessore, first touches on the district at Chānduriā, and then flows south-west through the 24-Parganas. It re-enters Khulnā at Bādhānagar on the confines of the Kaliganj thāna, and then keeping a southerly course forms the boundary between this district and the 24-Parganas as far as Basantpur. Here it bifurcates, one branch, called the Kalindi, forming the boundary of the district

down to the sea, while the parent stream pursues a south-easterly direction through the interior, being joined by the Kāṅksiali *Khal* near Kāliganj. After throwing off, at Iswaripur, a small stream called the Ichhāmāti, it continues its southward course, winding through the forests and swampy islands of the Sundarbans, till it finally empties itself into the Raimangal, a short distance from the place where that estuary debouches into the sea.

The Jamunā has now silted up from below Kāliganj to a short distance above Nakipur, and its bed has been brought under tillage. It is also silting up in its upper reaches, and large shoals are being formed between Taki Sripur and Debhātā. It is still navigable, however, all the year round by large boats in the upper portion of its course, which forms part of the inner boat route between Husainābād and the Kāṅksiali *Khal*. The principal places along its banks are Sripur, Debhātā, Kāliganj and Iswaripur.

This river, which is also called the Jabunā, is known in the upper portion of its course as the Ichhāmāti, a deltaic distributary of the Ganges, and was probably at one time one of its main outlets when it was forcing its way eastwards.

The branch which the Jamunā throws off at Iswaripur is also Ichhāmāti, known as the Ichhāmāti, but after a few miles it takes the name of Kadamtali and flows through the Sundarbans till it empties itself into the Malancha river shortly before it falls into the sea.

The Sonai is another offshoot from the Ichhāmāti or Jamunā, Sonai, which flows first in a south-easterly and then in a south-westerly course till it falls into the Balu *Bul*. This river has almost entirely silted up at its head.

The Kāṅksiali is a tributary of the Jamunā, which now forms part of the main boat route between Calcutta and Eastern Bengal, and is practically a canal. The name of this river has been Anglicised as Coxeeali. Kāṅksiali.

The Kāṅkīndi, which as above stated branches off from the Jamunā at Basantpur, flows in a southerly direction throughout the Sundarbans and falls into the Raimangal, a considerable distance above the point of junction between that river and the Jamunā. It is a wide stream with an average breadth of 400 feet, and is much used by country boats of heavy burthen coming from Eastern Bengal, which cannot follow the route by Husainābād to Calcutta. Kāṅkīndi.

The Kholpetuā is a river branching off from a multiplicity of other streams, but receives its waters principally from the Khabadak near Asani. It first keeps a westerly direction for a short distance, being called the Moruchar in this portion of Khol.

its course, and after receiving the waters of the *Budbhata Gāng* (also called the *Betnā*), turns to the south till it is joined by the *Galghasia*. The united river then flows through the *Sundarbans* till it rejoins the *Kabadak*, a few miles above the place where that river in its turn empties itself into the *Pāngasi*. The *Kholpetua* attains a great breadth after it is joined by the *Galghasia*, the width of the channel increasing from 150 to 600 yards in a length of 16 miles. It is navigable all the year round by large boats, and forms the outer route for boats of heavy burden between Eastern Bengal and Calcutta. The name *Kholpetua* means the death-bellied river and has been Anglicised as *Culputtoos* or *Culpetua*. It is also sometimes called the *Golpetua*.

Betnā. The *Betnā* enters the district from Jessore near the village of *Pānkauri*, and flows generally in a southerly direction till it falls into the *Kholpetua*. It is an offshoot of the *Kabadak*, and is also called the *Budbhata Gāng* from a village of that name near its mouth.

Galghasia. The *Galghasia* is formed by the junction of the *Wazirpur Kāṭā Khāl* and *Guntiākhali*, and flows in a south-easterly direction till it falls into the *Kholpetua* opposite the village of *Kalyānpur*. The *Wazirpur Kāṭā Khāl* forms part of the route for heavily laden boats proceeding from Calcutta to the eastern districts; and the *Galghasia* forms one of the passages for the large *Sundarbans* wood boats. Both are deep rivers, and have an average breadth of about 200 yards. The *Guntiākhali* is a branch of the *Sobnāli* river, which it joins at *Asāsuni*. It runs a south-westerly course until it falls into the *Bānstolā Khāl*, thence continuing its course as the *Galghasia*. As the tide comes into it from both ends, from the *Kabadak* and the *Kholpetua*, it silts up quickly and requires to be cleared periodically in order to keep it navigable by large boats. This channel is more generally known as *Asāsuni Khāl*.

Sobnāli. The *Sobnāli* is so called from its passing the large village of that name and is also known as the *Bengdaha* or *Kundaria Gāng*. It takes its rise from a number of small watercourses in the *Bairā Bil* or marsh near the village of *Balliā* (*Bulitā*), and flows in a south-easterly course till it reaches *Asāsuni*, where it joins the *Marichhāp*, which is one of the principal boat routes between Calcutta and Eastern Bengal.

Kabadak. The next large river is the *Kabadak*, which formerly flowed from the eastern bend which the *Mathābhāngā* makes near *Matīari* in the *Nadiā* district, now a semi-circular lake on the east of the Eastern Bengal State Railway. From this bend the *Kabadak* flowed eastward to *Kotchāndpur* on the borders of *Nadiā* and thence southwards to the sea; but the bend has silted up, and

the Kabadak has altogether lost connection with the Māthabhāṅgā. It first touches on Khulnā near Chaklā, a short distance from Tirmohini in Jessore. It then forms for some distance the boundary between the Khulnā and Sātkhirā subdivisions, and for the rest of its course is a large tidal stream. In its upper reaches, its numerous windings render navigation tedious, but it is navigable for despatch steamers as far as Tirmohini. It crosses the outer boat route at Chāndkhāli, and passes the markots of Tālā, Kapilmuni, and Kātipārā.

Five miles east of Asāsuni the Kabadak is joined by the Marichhāp Gāṅg, which communicates with the series of passages and canals leading to Calcutta; and two miles below this junction it sends off the Chāndkhāli *Khal* eastwards, continuing the boat passage through this district towards Dacca. Further to the south the Kabadak unites with the Kholpetuā, and the combined stream then takes the name of the Pāṅgāsi, Naingod, Samudra, Bara Pāṅgā, and, near the sea, Mālanchā, under which name it falls into the Bay of Bengal. It is also known as the Kabodak or as the Kapotaksha or dove's eye, a picturesque name suggested apparently by its placid stream.

The Bhairab enters the district from the north near Phultālā Bhairab. and flows in a south-easterly course to Khulnā. It then passes to the south, discharging a great part of its water into the Rūpsā or Passur, while the main channel runs to the south-east past Fakirhāt and Bāgherhāt, and joins the Madhumati at Kachua. At Jātrāpur, halfway between Bagherhāt and Fakirhāt, the river makes a horse-shoe bend some 4 miles long, and here a cut has been made through the neck by the Public Works Department, thus shortening its course considerably. The Bhairab formerly issued from the Kabadak and was the central stream of Jessore, but its head silted up about the end of the 18th century, and it has now become practically a dead river, to use the expressive vernacular term.

The portion flowing through Khulnā was formerly navigable all the year round by large boats. Within the last decade, however, the channel between Alāipur and Mansā, where it assumes the name of Alāipur *Khal*, has been silting up fast, thereby closing the inland steamer route from Khulnā to Bāgherhāt and thence to Barisal. Two attempts made by the Public Works Department to re-establish communication by excavating its bed failed, and the project has been abandoned. The *khal* is still navigable by boats at high tide; and it is proposed to keep it open by dredging periodically. It is worthy of note that the Bhairab and its parent stream, the Kabadak, are the

rivers on the banks of which the residences of the better classes are mostly built; and its name, which means the terrible, shews the estimation in which it was once held.

**Athāra-
bānkā.**

Near Khulnā the Bhairab is joined by the Athārahānkā, i.e., the channel of 18 bends, a cross stream which conveys the surplus waters of the Madhumati into the Bhairab. It forces down such a volume into the Bhairab that the bed of the latter stream no longer suffices for its exit southward, and the Bhairab itself turns backwards at Alāipur, till it finds an outlet for its surplus water in the Rūpsā river. The Atharabānkā is 200 yards wide in the rains, and is navigable all the year round by large cargo boats and inland steamers. It is also called locally the Athārabenki.

Rūpsā.

The Rūpsā river was originally a channel cut by one Rūp Sāha, which served as a canal till the water of the Atharabānkā forced its way along it and made it one of the largest tidal *kāds* of Khulnā. It flows from north-east to south-west from the Bhairab at Khulnā to the Kazibachā river, a distance of 8 miles. It is 350 yards wide during the rains, and is navigable throughout the year by inland steamers and large country boats.

Bhadra.

The Bhadrā enters the district at Baratia and continues in a south-easterly direction to the Sundarbans. Below Kesabpur it widens out, and in this portion of its course it forms a large tidal stream.

**Madhu-
mati.**

The Madhumati is the largest river in Khulnā and is, in fact, one of the principal distributaries of the Ganges in Bengal and Eastern Bengal. It leaves the parent stream near Kushtia in Nadiā, where it is called the Garai, and thence flowing south, assumes the name of Madhumati, meaning the honey-bearing river. It enters the district near its north-east corner at Manikdaha, and from this point it takes the name of Baleswar, meaning the lord of strength, and forms the eastern boundary of the district still flowing south, but with great windings in its upper reaches. It then crosses the Sundarbans, separating the Khulnā from the Backergunge portion of that tract, and enters the Bay of Bengal after a course of 230 miles, under the name of Haringhātā, meaning the watering place of deer. The river, which here forms a fine estuary, 9 miles broad, is navigable to opposite Morrellganj by sea-going ships, and throughout its entire course by native boats of the largest tonnage. Its principal tributary in this district is the Bhairab.

**Cross-
channels.**

The principal cross-channels are the Sibsā (or Sipsā), Bosekhālī, Khaal, Deluti and Chitrā. The Sibsā river and Bosekhālī Khaal flow from east to west connecting the Deluti with the Kabadak. They are 9 miles in length, have a breadth of 270 yards in the rains,

and are navigable by large boats all the year round. The Delati river runs from north-east to south-west extending from the Bhadrā to the Sibsā. It is 5 miles in length, 160 yards wide during the rains, and navigable all the year round by large boats.

There are two rivers called Chitrā. Chitrā I flows from north-west to south-east extending from the Kharagdaha to the Athārabānkā river, a distance of 94 miles. It is 60 yards wide in the rainy season, and is navigable for 3 months of the year by small boats as far as Khajurā; below this point it is navigable all the year round by small boats, and by larger craft during the rainy season. Chitrā II also runs from north-west to south-east, leaving the Athārabānkā at Nagarkandi and emptying itself into the Madhumati at Chitalmāri. It is 22 miles in length, is 80 yards wide during the rains, and is navigable all the year round by medium-sized passenger or cargo boats.

The rivers coming down from the north throw off numerous branches, which, interlacing with each other, form a network of islands, especially towards the coast, where they broaden out into large estuaries subject to tidal action. The interlacings are so numerous and complicated, and the swamps in which the channels lose themselves or merge with other streams are so perplexing, that it is impossible to give a detailed, and at the same time intelligent, account of the river system. The whole country is, in fact, a labyrinth of rivers and watercourses, connected by innumerable distributaries, which, after endless bifurcations and interlacings, unite into large estuaries falling into the Bay of Bengal. The principal of these arms of the sea, proceeding from west to east, are the Raimangal, Mālanā, Bara Pāngā, Marjātā, Bāngrā and Haringhatā. The other large rivers of the Sundarbans, which are connected with those above mentioned, are the Passur (also called Pussur or Pusur), Bishkhāli, Thākūrān, Kabadak, Hāriābhangā, Kholpetuā, Ichāmāti, Sibsā, Bhadrā and Bholā. The minor rivers are innumerable, and are simply channels or cross-channels of the above rivers.

The sea coast is fringed by a belt of low-lying swamp and uninhabited jungle extending for many miles inland. From the land side the shore shelves out gradually, but in front of it numerous unbuoyed reefs extend for 18 to 30 miles seawards. The whole coast is full of breakers, and is consequently difficult of approach except by a few tortuous channels. It is intersected by numerous estuaries, but their mouths are often obstructed by sand bars, which effectually prevent the passage of vessels of any size. The following is a brief account of the principal estuaries proceeding from west to east.

**Rai-
mangal.** The westernmost estuary in Khulnā is the Raimangal, which from Kaliganj downwards marks the boundary between this district and the 24-Parganas. It is formed by the junction, about 6 miles from the sea, of three rivers, viz., the Hāriabhāṅgā to the west, the Raimangal river in the centre, and the Jamunā to the east. It is navigable by small craft all the year round.

Mālanchā. Four to six miles eastward of the Raimangal is the Mālanchā estuary, and a few miles farther to the eastward is the Bara Pāṅgā, having its channel separated from the former by Pātāl island. An extensive reef or flat stretches out $3\frac{1}{2}$ or 4 leagues from this island, on which the ship *Falmouth* was lost in 1766. Due south from the Raimangal and Mālanchā rivers is the "Swatch of no ground." This consists of a great natural depression or hole in the Bay of Bengal, of which a description will be found in Chapter XV. The name Mālanchā has been Anglicized as Mollinchoew.

Marjātā. The next estuary is the Marjātā river, situated $2\frac{1}{2}$ or 3 leagues to the eastward of Pātāl island. It has a wide entrance, about 4 or 5 miles, inside which are two islands, called the Parbhāṅgā islands. On the reefs bounding the channel leading to this river the ship *Bulchirs* was lost in 1771. About 10 miles east-north-east from its mouth is a much smaller estuary called the Bāṅgrā.

Haringhātā. The Haringhātā, the easternmost estuary in Khulnā, is situated about 15 miles north-east of the Bāṅgrā. It has a very spacious entrance, about 9 miles wide, between two great banks, which project from the land on each side. Although there is a bar at the mouth with only 17 feet of water at low tide, the navigation is easier than that of any other river at the head of the Bay of Bengal. The great banks or shoals, which have formed at each side of the mouth and extend seaward for several miles, protect the entrance, and act as breakwaters to the swell. The stream is not disturbed by the "bore," which visits the Hooghly and the Meghnā, and it is also free from mid-channel dangers. It serves as the outlet of Morrellganj, a town situated on one of its branches, the Pāṅgāsī, about 50 or 60 miles from its mouth. This place was declared a port in 1868 for shipping and landing goods during the north-east monsoon; but failed to attract trade. Steamers of the Inland Steam Navigation Companies, however, call there, and a fair trade in rice and betel-nuts is carried on.

**Lakes and
marshes.** One of the most characteristic features of Khulnā is the large number of marshes called *bik*. Many are of small size, but others are practically shallow inland lakes. Some are mere

accumulations of water upon low-lying ground, while others are natural drainage basins, the level of which does not admit of drainage. Their formation is due to the configuration of the district, which is divided by the interlacing of the rivers into what are practically islands. Each of these is bounded by rivers, and the highest level is along their banks, so that the fall from all directions is towards the centre, which again is drained by a creek or *khal*, communicating with one of the surrounding rivers. In some places, the basin thus formed is on a fairly high level, and the central depression, being sufficiently high to be above water, at least during some months of the year, is used for growing crops. Other such depressions are water-logged, but can still be used for growing rice; while others again are inland lakes always under water and cannot be utilized for cultivation. The latter are known as *bils* or *jhils*, and are exceptionally numerous in Khulnā, the principal *bils* being 24 in number and having an area of 292 square miles. The largest of these is the Bairā *Bil*, situated on the east of the Jamunā river in Buran *pargana*, which extends over 40 square miles; but the greater part of the *bil* is now under cultivation. Other large *bils* are the Dākatiā, Pablā, Shāhpur, Korāmārā, Dhunkhain, Kutahe, and Danobhāngā. Besides these marshes, large accumulations of water, called *baors*, are found in the deserted beds of rivers, among which the Khura and Srirāmpur *baors* are noticeable.

The soil of the district is composed of recent alluvium and GEOLOGY. the most remarkable fact connected with its geological formation is there are reasons for believing that there has been some subsidence of the country. This theory is confirmed by the discoveries made 50 years ago by Colonel Gastrell, who wrote:—“What maximum height the Sundarbans may have ever formerly attained above the mean tide level is utterly unknown; that they ever were much higher than at present is, I think, more than doubtful. But that a general subsidence has operated over the whole extent of the Sundarbans, if not of the entire delta, is, I think, quite clear from the result of examination of cuttings or sections made in various parts where tanks were being excavated. At Khulnā, about twelve miles north of the nearest Sundarban lot, at a depth of eighteen feet below the present surface of the ground, and parallel to it, the remains of an old forest were found, consisting entirely of *sundri* trees of various sizes, with their roots and lower portion of the trunks exactly as they must have existed in former days, when all was fresh and green above them; whilst alongside them lay the upper portions of the trunks, broken off and embedded in a thick stratum of old half-decomposed

vegetable mould nineteen inches in depth, from which, when first exposed, leaves, grasses and ferns could readily be separated and detached. Below this were other thinner strata of clays and vegetable mould corresponding to the Calcutta peat, whilst above was a stratum of argillaceous sand passing into stiff blue clay containing numerous shells. One of the trees was found projecting far into the upper stratum of blue clay. Many of the trees were quite decomposed, whilst in others the woody fibre was nearly perfect."

That this subsidence of the surface of the ground is not confined to the Sundarbans, seems to be confirmed by the fact that stumps of trees have also been found at Scaldah in Calcutta, at various levels down to a depth of 30 feet, or 10 feet below the peat. These trees also were pronounced by the Superintendent of the Botanical Gardens to be *sundri*, a tree which never grows to within six or eight feet of the lowest tide levels. It grows only on mud, or where the surface is not too frequently flooded to allow of the growth of grass, but, at the same time, it requires that its roots be exposed to the air for at least several hours of each tide. If the present level of their roots could suddenly become the level of the country, the whole of the Sundarbans at least would be under water, and it appears therefore that the deltaic tract stretching from Khulna to Calcutta must at some time have undergone a subsidence. The following evidence in support of this view may be quoted from the *Manual of the Geology of India* by R. D. Oldham (1893).

"The peat bed is found in all excavations round Calcutta, at a depth varying from about 20 to about 30 feet, and the same stratum appears to extend over a large area in the neighbouring country. A peaty layer has been noticed at Port Canning, 35 miles to the south-east, and at Khulna, 80 miles east by north, always at such a depth below the present surface, as to be some feet beneath the present mean tide level. In many of the cases noticed, roots of the *sundri* tree were found in the peaty stratum. This tree grows a little above ordinary high water mark in ground liable to flooding, so that in every instance of the roots occurring below the mean tide level, there is conclusive evidence of depression. This evidence is confirmed by the occurrence of pebbles, for it is extremely improbable that coarse gravel should have been deposited in water 80 fathoms deep, and large fragments could not have been brought to their present position unless the streams, which now traverse the country, had a greater fall formerly, or unless, which is perhaps more probable, rocky hills existed which have now been covered up by alluvial deposits,

The coarse gravels and sands, which form so considerable a proportion of the beds traversed, can scarcely be deltaic accumulations, and it is therefore probable that when they were formed, the present site of Calcutta was near the margin of the alluvial plain, and it is quite possible that a portion of the Bay of Bengal was dry land."

As regards the cause of this subsidence various theories have been propounded. One writer, in an article published in the *Calcutta Review*, ascribes it to the weight of the superincumbent earth and forest. "If," he says, "we consider the unsubstantial nature of the foundation of the Sundarbans, which, at a distance of only 120 feet from the surface, consists of a bed of semi-fluid mud 40 feet in thickness, and then remember the terrific convulsions that have at different periods shaken the delta to its deepest foundations, we must not be surprised to find that the liquid mass, unable to support the superincumbent weight, has repeatedly bulged out seaward, reducing the level of the delta, submerging whole forests, together with their fauna and flora."* Colonel Gastrell again considered that, though the general depression may have been caused partially in this way, it was more probable that it was caused suddenly during some great earthquakes. "The fact of all the trees being, as a rule, broken off short, and none being found standing at Khulnā or Sealdah, might in that case be accounted for by the enormous wave that in such a subsidence would have rolled in from the Bay over the Sundarbans, destroying all in its path. Or supposing the subsidence not to have been general over the whole tract at first, and only sufficient to have submerged the roots below low-tide level, and so killed them, all would have dried up as they stood, and succumbed to some one of the cyclones that must have subsequently swept over the tract. The latter assumption seems likely, because, whilst at Khulnā and Sealdah the trees were all broken short off close to the ground, at Mātā, which is situated between these places, they are said to have been found intact and unbroken, which could not have been the case had a great wave, caused by the sudden subsidence of the country, swept in from the Bay over the sinking forests; in that case, Khulnā, Mātā, and Sealdah, supposing the submergence general, would have been exposed and suffered alike, and the trees would have been equally decomposed in all places. The fact of their not being so, seems to clearly show that the subsidence at Khulnā was prior to that at Mātā, as in the first place the trees were mostly decomposed, while in the

* *The Gangetic Delta, Calcutta Review, 1860.*

second they were not so. All is pure conjecture, however, and the causes may have been very different."

BOTANY.

In the north-west of the district there are extensive groves of date-palms especially on the outskirts of villages. The north-east and centre of the district are generally inundated during the rainy season, only the river banks and the artificial mounds on which habitations are situated rising above the fresh water sea that results. These elevated embankments are, where not occupied by gardens, covered with a scrubby jungle of semi-spontaneous species, from which rise bamboos, betel and coconut palms with a few taller trees. The surface of the marshes shows either huge stretches of inundated rice or is covered with matted floating islets of sedges and grasses and various water lilies.

In the Sundarbans tract a different class of vegetation is found. The portion nearest to the sea, an intricate system of sea-creeks and half-formed islands, densely clothed with a tidal forest of a purely Malayan type, separates itself spontaneously from the alluvial rice plain to the north, where the river banks at least are higher, where tanks can be dug that will retain fresh water, and where only the larger streams are much affected by the tides. Thus dense forest forms the compact and natural Sundarban province, filled with species to be met nowhere else in Bengal save along the southern coast of Chittagong, and, to a minor degree, in the delta of the Mahanadi.* In the evergreen forest covering the islands various mangroves hold first place, with an undergrowth of climbers and herbaceous plant. Two gregarious palms are conspicuous, the *Nipa fruticans* in the swamps and on the river banks, and the *Phoenix paludosa* in drier localities. The former is a low stemless palm, which throws up pale yellow-green tufts of feathery leaves, often 30 feet long, and bears a large head of nuts. The latter is a dwarf slender-stemmed palm, which covers the whole landscape with a carpet of feathery fronds of the liveliest green, presenting so dense a mass of foliage, that when seen from above, the stems are wholly hidden. A remarkable feature of the estuarine vegetation is the habit of several of the endemic species, e.g., *Heritiera*, *Amorpha*, *Sonneratia* and *Phoenix paludosa*, to send up from their subterranean roots a multitude of aerial root-suckers, in some cases several feet long, which act as respiratory organs.†

The following account of the flora of the Sundarbans has been contributed by Lieutenant-Colonel D. Prain, I.M.S.

* D. Prain, *Bengal Plants*, Calcutta, 1902.

† *Imperial Gazetteer of India*, Vol. I, pp. 183-184.

The flat swampy islands surrounded by interlacing creeks and channels in the lower delta are covered with dense forest. The most plentiful and important species is *sundri* (*Heritiera minor*), which is of larger size and forms a purer forest where the water in the channels is least brackish. Associated with *sundri* are species of *Amoora*, *Excæcaria*, *Carapa*, *Avicennia*, *Cynometra*, *Intsia* and *Dolichandrone*. On the banks of creeks and rivers are two species of *Sonneratia*, a *Carapa*, a *Barringtonia*, *Hibiscus tiliaceus*, *Brownea*, *Pongamia*, two *Dalbergias*, a *Cassia*, *Avicennia*, *Acanthus ilicifolius*, *Cerbera*, *Ægiceras*, *Ægialtis*, *Phoenix paludosa*, *Nipa* and several other shrubs and climbers. These are especially plentiful in the northern parts, where some of them extend into the swamp forests, and, with *Tamarix*, *Pandanus*, *Calamus*, *Flogellaria* and some others, form a rather dense undergrowth; elsewhere the undergrowth is very scanty. With these plants on northern river banks some mangroves, especially *Kandelia* and *Bruguiera*, are associated. As the influence of the tides increases, the mangroves become more numerous, *Ceriops* and *Rhizophora* now appearing with the others, till at length the riparian vegetation is altogether mangrove. By this time too, *sundri* and its associates largely disappear from the swamp forests, which are now mainly composed of *god* (*Excæcaria Agallocha*). Nearer the sea, *god* in turn disappears, and the forest is almost exclusively composed of mangroves. This pure mangrove forest sometimes extends into the tides, but at other times is separated from the waves along the sea face by a line of low sand hills on which reappear some of the swamp forest species, accompanied however by a few plants characteristic of other Asiatic shores, like *Erythrina indica*, *Thespesia populnea*, *Ficus Rumphii*, and others, for which the conditions present in the swampy islands appear to be unsuited.

The wild animals of Khulnā include tiger, leopard, rhinoceros, FAUNA. wild buffalo, wild pig, wild cat, deer, porcupines, otters and monkeys. These animals are found for the most part in the Sundarbans to the south and are comparatively scarce in the settled tracts to the north. The rhinoceros was formerly common, and Alexander Hamilton, writing of the Sundarbans in 1727, described them as containing many of these animals. "The tongue of the rhinoceros," he adds, "is somewhat of a rarity, for if he can but get any of his antagonists down he will lick them so clean that he leaves no skin or flesh to cover their bones." Even as late as 1859 we find it stated that the country at the mouths of the Malanchā and Raimangal rivers was infested by rhinoceros and deer, the whole ground being cut

up by their feet. Both rhinoceros and buffaloes have now been almost exterminated by native *shikāris*. Tigers, however, are exceptionally numerous, and as many of them are man-eaters, they are literally a scourge in the forest area. This is no new feature, for 30 years ago Sir James Westland mentioned one such brute who was an object of dread over a large tract of land. "Hardly a week passed but there were one or two reports of people carried off by him, and he used to be perfectly well known. He had apparently a charmed life. One day he came on board an Englishman's boat and coolly walked off with one or two of his oarsmen. The Englishman levelled a blunderbuss at him, but the instrument burst, and while it much injured the shooter, the tiger got off scot-free. On another occasion the same tiger passed within a few yards of a gentleman who was accustomed to and prepared for such interviews. He of course fired, but again the beast escaped scatheless. This pest was finally killed by Mr. Morrell of Morrellganj, who laid wait for him, shutting himself up in an iron cage. The tiger was only severely wounded by the shot, and he charged and knocked over the cage; but the cessation of his ravages showed that the wound had a mortal effect."

These brutes, who will swim broad streams in search of prey, are justly dreaded by those whose business takes them into the forests. No woodcutter will go there to cut wood unless accompanied by a *fakir*, who is supposed to have power over tigers and other wild animals. Before commencing work, the *fakir* assembles all the woodcutters of his party, clears a space at the edge of the forest, and erects a number of tent-like huts, in which he places images of various deities, to which offerings are made. When this has been done, the allotment is considered free of tigers; and each woodcutter, before commencing work, makes an offering to the jungle deities, by which act he is supposed to have gained a right to their protection. In the event of any of the party being carried off by a tiger, the *fakir* decamps, and the woodcutters place flags at the most prominent corners of the allotment to warn off others.

The difficulty of clearing the forest of these brutes is naturally very great owing to the dense jungle, and it has sometimes happened that while the sportsman imagined that he was following up a tiger, the tiger was stalking him. "No less than 101 men were killed by tigers in the Sunderbans forests in 1905-06, and 83 in 1906-07. In order, if possible, to reduce their numbers, Government pays a reward of Rs. 50 for each tiger shot east of the Passur river and Rs. 100 for each of those to the west of it.

Regarding the causes of the prevalence of man-eating tigers, Sir Henry Farrington, Deputy Conservator of Forests, formerly in charge of the Sundarbans Division, writes:—"This is probably the result of their being fired at by native *shikaris*, who, as a rule, only use small slugs which wound and irritate the tiger without killing it. The diminution in the number of deer caused by wholesale slaughter by native *shikaris* also tends to make tigers man-eaters, for it is obvious that, in forests with a normal stock of *chital*, tigers would have no difficulty whatever in getting a living and would considerably avoid mankind. Even a confirmed man-eater would be less harmful if deer were in abundance. It is also a curious fact that man-eaters are far worse in those localities most frequented by native *shikaris*." With reference to these remarks, however, it may be observed that the man-eating propensities of tigers in the Sundarbans have been notorious for over two centuries. Bernier, describing this tract in the latter half of the 17th century, writes:—"It is in many places dangerous to land, and great care must be had that the boat, which during the night is fastened to a tree, be kept at some distance from the shore, for it constantly happens that some persons or another falls a prey to tigers. These ferocious animals are very apt, it is said, to enter into the boat itself, while the people are asleep, and to carry away some victim, who, if we are to believe the boatmen of the country, generally happens to be the stoutest and fattest of the party." It may be added that in the Sundarbans a tiger is called a *sial*, which in other parts of Bengal means a jackal.

Leopards are also numerous in the Sundarbans and in newly reclaimed land, where they take up their quarters in thickets near human habitations and carry off cattle and other animals. Lately one appeared in the outskirts of the town of Khulna, but was scared away after it had managed to kill a three-legged cow. Wild pigs are numerous and destructive to the crops, and deer also do great damage in November and December when the rice has not reached maturity; they include spotted deer, barking deer and hog deer, but the most common is spotted deer.

. The game birds of the district include wild-goose, wild duck, Birds. cranes, jungle-fowl, snipe, partridge, and numerous water-fowl, which are common both in the Sundarbans and in the large *bils* situated in the interior. Among other birds may be mentioned adjutants, of two kinds, one the common *Ardea gigantea*, the other the marabout adjutant, from which is obtained the beautiful feathers bearing that name, fishing and other eagles, vultures,

kites, hawks, owls, *munias*, doves, parroquets, flycatchers, orioles, woodpeckers, sandpipers, egrets, waders, small and large spoon-bills, pelicans, storks, paddy birds, herons, etc.

Crocodiles.

The rivers and estuaries are infested with crocodiles, which are exceptionally numerous in the Madhumati and Bhairab, while in the Sunderbans they are so abundant that it is not safe to bathe except at places specially protected by palisades of bamboos or wooden stakes. Even this precaution sometimes fails. Instances have frequently been known of crocodiles entering within the palisades from the land side during the night. In the morning the first notice of the hidden danger is the struggles and shrieks of some unfortunate woman seized and dragged under water. A striking instance of their audacity is on record. Many years ago at Khulná a gang of convicts were being inspected by the Magistrate prior to their being sent off to another and more distant jail. The men, numbering with their guards about 50, were drawn up in line on the raised embankment of the river, and the examination was proceeding, when a crocodile rushed up the bank, seized a prisoner by the legs, dragged him from the ranks, and in a moment, before any assistance could possibly be rendered, had plunged into the river and disappeared. Sharks, also, are by no means uncommon in the larger streams and estuaries.

Fish.

Fish also abound in nearly all the rivers and estuaries. The most valuable fish caught in the estuaries and estuarine rivers are different kinds of mugils and *Polynemus* and the well-known *bhetki* (*Lates calcarifer*). The delicious *topoi* (*Polynemus paradiseus*) is also found in some of the tidal rivers, such as the Passur, and the *hilsa* (*Clupea ihsha*) in the Madhumati. The Sunderbans, in fact, form the most valuable of the estuarine fisheries in Bengal, for the numerous waterways are full of fish and crustacea, and in Khulná this source of fish supply has barely been tapped. Fish are also numerous in the inland rivers, but the deterioration of their channels caused by the receding of the Ganges water has seriously affected the supply. They have now become tidal, and the water is consequently brackish, so that carp have already deserted them. The *bils* are also valuable fisheries. In the rains they afford spawning ground for numerous varieties of fish, and shelter to all during the dry season. Moreover, being usually full of hardy aquatic weeds and floating plants of various kinds, they are not open to free netting and are immune from modes of capture which might exhaust the supply. The water being practically stagnant is not favourable to carp life, and the larger

varieties usually desert them in favour of rivers. But they are the proper home of *koi* or climbing perch (*Anabas scandens*), *māgar* (*Clarius magur*), *singi* (*Saccobranches fossilis*) and a host of other fish, which, though dark and unsightly, and often of small size, are highly prized by the people as affording nourishing food, especially for the convalescent. With the gradual silting-up of the rivers and the increasing pressure of population, however, the *bils* are being reclaimed and brought under cultivation causing a corresponding reduction of the fishery area. Numerous fish are also found in the tanks which abound in the district for it is not possible to build a house except on the bank of a river, without first raising the land with earth and thereby excavating a tank.

The *koi* above mentioned is one of the most curious fish found in the district. It is an ugly, voracious little fish about 5 inches in length, of a mottled brown and yellow colour. Numbers of them may be seen hanging on to the mangrove stems by spines arranged along the margin of the gills, three or four feet above the level of the receding tide, from which elevation they drop into the water by scores when disturbed by a boat or a steamer passing; or they may be seen floundering about upon the black mud, where they lie in hundreds sunning their ugly little bodies.

The seasons in Khulná are substantially the same as in CLIMATE. other parts of Lower Bengal. The winter sets in the beginning of December and lasts till the middle of February. These are cool months with a prevailing north-west wind and a heavy dew at night, but are trying to persons predisposed to rheumatism. From the middle of February to the end of March, a period locally regarded as the spring, the wind veers round from the north-west to the south, and is often variable. It is tolerably hot during the day time, and is fairly cool at night, when there is often heavy dew. The weather becomes very hot in April and continues so till the middle of June, when the temperature is lowered by the setting in of the monsoon. But even during the rains the heat is often great, and if there is no rain for a week or so, it becomes extremely sultry. The rains abate in September, when the heat again becomes trying and the atmosphere steamy. October and November may be termed the autumn in this district; and the cold weather may be said to begin in November. By January it is often quite cold.

The sounds known as the "Barisal guns," because they Barisal resemble the report of cannon or loud explosions, are heard in this guns. district during the south-west monsoon and rainy season. They appear to come from the south or south-east, i.e., from the sea-

board, and are usually heard distinctly after a heavy fall of rain or on the cessation of a squall, generally while the tide is rising. Mr. H. J. Rainey, a zamindar of Khulna, has pointed out one curious circumstance, viz., that the direction of the sounds appears to travel invariably along the course of the streams that discharge themselves into the Bay. "Thus circumstance," he says, "I have carefully observed for a series of years, and hence I indicated the noises as coming from the sea-board. Khulna is situated on the confluence of the rivers Bhairab and Rûpsa (the latter a local name for the continuation of the Passur), which run respectively north and east of it; and when I was residing there, I noticed that the sounds appeared to come from the south-east, while now that I am living across the Rûpsa, on the west side of it, the noises are heard from the south-west."

Rainfall.

The rainy season begins about the middle of June and continues till October. But in the latter part of March, during April and sometimes in May, the north-west wind brings in showers between 3 or 4 o'clock in the afternoon accompanied by lightning. The annual average rainfall for the whole district is 65·97 inches, of which 6·45 inches fell in May, 12·76 inches in June, 13·10 inches in July, 12·32 inches in August, 9·55 inches in September and 5·21 inches in October. The following table shows for the cold, hot and rainy seasons the rainfall recorded at the different rain registering stations, the figures shewn being the average in each case:—

Station.	Years recorded.	November to February.	March to May.	June to October.	Total.
KHULNA ...	29—30	2·68	11·27	50·96	64·91
HAUGHERMAT .	29—30	2·79	11·61	56·69	71·09
NAKIPUR .	11—12	2·05	8·51	52·02	62·57
RAIPAL ...	10—11	2·64	10·35	55·27	68·26
SATEKHIRA ...	30—31	2·22	11·05	49·77	63·04
DISTRICT AVERAGE	2·48	10·65	52·94	65·97

* Proceedings of the Asiatic Society, Bengal, 1879, pp. 243, 244, 291.

CHAPTER II.

HISTORY.

IN prehistoric times, Khulnā is believed to have formed part of the deltaic tract known as Banga. In the *Āitareya Aranyaka* the inhabitants of this tract are represented as eaters of indiscriminate food and progenitors of many children, while the *Raghuransa* describe them as living in boats and growing transplanted rice for their staple crop—a description which has been said to mark them as the ancestors of the Chaudāls, who form a predominant race in Khulnā. These references would lead one to suppose that the people of the lower delta were in a very low state of civilization, but later accounts show that this tract had become a populous and civilized country. It appears to have formed part of the kingdom of Sāmatata, a name meaning the low-lying country near the sea. As early as the fourth century A.D. the conquests of Samudra Gupta extended as far as Samatata, and in the seventh century A.D. we find the Chinese traveller Hsien Tsiang describing it as a low-lying country bordering on the great sea, rich in crops, flowers and fruits. "The climate" he said, "is soft and the habits of the people agreeable. The men are small of stature and of black complexion, but hardy by nature and diligent in the acquisition of learning. There are some 30 Buddhist monasteries with some 2,000 priests and 100 Hindu temples, while the naked ascetics called *Nigranthas are also numerous." From this account it would appear that the doctrines of Buddha had spread to the south of the Gangetic delta. The royal family seems also to have embraced Buddhism, for one of them, Silābhadrā, whom Hsien Tsiang met in Magadha, was a venerable old Buddhist scholar, while another native of Samatata, Indrābhadrā, who was perhaps a spiritual descendant of Silābhadrā, set up a fine life-size image of Buddha at Bodh Gayā.* Later, in the 14th century A.D., this tract formed part of Bagri, a name given to the southern deltaic portion of the kingdom of Ballal Sen.

* Report Arch. Surv. Ind. for 1903-04 (p. 52).

These references, fragmentary as they are, cannot be said to have special application to the tract included in the present district of Khulnā. Indeed, it has been held that in the early ages this part of the delta had not yet been formed. Thus, Bābu Nabin Chandra Dās writes in *A Note on the Ancient Geography of Assam*:—"It is probable that the Ganges originally met the sea in the tract which now forms the district of Murshidābād or Nabadwip (Nadiā, now isles). Lower Bengal, or the delta of the Ganges and the Brahmaputra, was then a part of the sea, which generally receded southwards in the course of time, a theory which receives corroboration from other quarters also." This corroborative evidence is set forth by the author as follows:—"We find in the *Mahabharata*, *Vana Parva* (Ch. 113), that Yudhisthira came to the Kausiki *Tirtha* (junction of the Kausir or Kusi and the Ganges, opposite Coimbatore), and found the sea beyond, with 500 rivers flowing into it. Kālī Dās in his *Raghuransa* (Canto iv) speaks of the army of Raghu as having flowed, like the Ganges, led by Bhagirath, to the eastern ocean and conquered the Suhmās, on the sea-shore dark with palm trees, and the Vangas, who fought with boats and erected monuments on the isles at the mouth of the Ganges. The eastern ocean meant is the Bay of Bengal, which then probably rolled her waves up to the sub-Himalayan tract east of Anga (Bhāgalpur) and west of Kāmṛūpa (Assam). The present Bay can hardly be said to be east of Ajodhyā, whence the army had marched down eastwards, according to the geography of the times as known to Kālī Dās."

**KHAN
JAHAN.**

The earliest traditions of the district are connected not with any ancient Buddhist or Hindu kingdom but with a Muhamadan called Khān Jahān Ali or more generally Khānja Ali. Local legend relates that he came here over four centuries ago to reclaim and cultivate the Sunderbans, which were then waste and covered with forest. He is said to have obtained a grant of this part of the country from the King of Bengal or the Emperor of Delhi, and one account, by a common anachronism, says that he was a courtier of Akbar. The story runs that a *sannyāsī* had promised to give the Emperor a valuable present, but when he came, the Emperor was asleep and Khānja Ali was fanning him. Khānja Ali being fearful of disturbing the Emperor, the holy man refused to wait, but before he left, blessed Khānja Ali and made over the gift to him. Pleased with the conduct of his courtier, the Emperor bade him retain the present and further ordered that he should be given a grant of money and any land on which he chose to settle. Khānja Ali then left the court and

came with a large number of followers to the Sundarbans, where he reclaimed a vast tract of jungle. He is represented as marching through the district with 60,000 men making his road as he went along, and as settling finally at Bāgherbāt. Tradition assigns to him remains found in various parts of the district, especially those near Bāgherbāt; and he is credited with building 360 mosques with stone brought from Chittagong, and also with digging 360 tanks called after his leading followers—Bakhtiyār Khān, Ikhtiyār Khān, Alam Khān, Saadat Khān, Ahmad Khān, Daria Khān, etc. In his old age he renounced worldly affairs and lived the life of an ascetic in Bāgherbāt, where his tomb may still be seen with an inscription saying that he left this world for a better one in the year 863 A.H., i.e., 1459 A.D. He is now regarded as having been a great warrior and a holy saint in his lifetime, and his tomb is a place of pilgrimage.

Apart from legend, we know little of this early Muhammadan ruler. Even the name popularly given to him (Khān Jahān Ali, corrupted by the rustic tongue into Khanja Ali) is not warranted, for in the inscription on his tomb he is simply referred to by his title Khān Jahān. It appears certain, however, that he was the Governor of this part of the country in the time of Nasir-ud-dīn Mahmūd Shāh (1442-59); and it is possible, as pointed out by Professor Blochmann, that he may be identical with a certain Khwāja Jahan mentioned in an inscription at Dacca, which says that the entrance to a mosque was erected by "a Khān whose title is Khwāja Jahān, in the reign of Mahmūd Shāh"; the date of the inscription corresponds to 13th June 1459.* Beyond this, history remains silent, but we may accept as true the popular tradition that, besides his own mausoleum, he erected the mosque at Bāgherbāt which now goes by the name of the Sāt-gumbaz, and that he was one of the earliest reclaimers of the Sundarbans. The legends about him, as handed down from father to son, are however not without historical value. In these legends, writes Dr. Bloch, "Khān Jahān appears as a holy man and a staunch warrior, who was sent out by the Emperor of Delhi to conquer the distant country, and who worked great miracles and achieved wonderful deeds. Similar stories of a military conqueror being turned into a Pir, or of a saint, like the famous Shāh Jalāl of Sylhet, waging war against the infidels, however fabulous in detail, still retain a distant echo of the important political role that was played in

* H. Blochmann, *Notes on Arabic and Persian inscriptions*, J.A.S.B., Part I. 1872 (no. 107, 108).

the earlier centuries of Muhammadan rule in India by saints and leaders of the great spiritual orders.”*

**KHALI-
PATAPAD.**

The tract of country round Bāgherbāt, over which Khān Jahān ruled, was known as Khalifatābād, i.e., the clearance of the Viceroy (*Khalifa*), and bore this name up till the end of the 18th century. Here, among the creeks and jungles, the Bengal king Nasrat Shāh (1519-32) erected a mint, apparently in opposition to his father Alā-ud-din Husain Shāh, for coins struck at Khalifatābād in 1515 during the life-time of the latter are still in existence. “It is, however, curious,” Professor Blochmann writes, “that a little higher up on the Bhairab, east of Khulnā, where the Athārabānkā (the eighteen windings) joins the Bhairab, there is an Alāipur, i.e., Alā-ud-din’s town. Were it not for the distinct statement of the *Riāzu-s-Salatin* that Alā-ud-din, after arriving as an adventurer in Bengal, settled at Chāndpur (a very common name) in Rādhā district, i.e., west of the Hughli, I would be inclined to identify the Chāndpur near this Alāipur as the place where the Husain dynasty of Bengal kings had its home, especially because Husain first obtained power in the adjacent district of Faridpur (Fathābād), where his earliest coins are struck.”† Another circumstance which appears to support the theory of Professor Blochmann about the *locus* of Husain Shāh’s adopted home is that the names of Husain Shāh, his brother Yusuf Shāh and his sons Nasrat Shāh and Mahmūd Shāh are found in connection with several *parganas* of Khulnā, Jessore and Faridpur, such as Nasratshāhi, Mahmūdshāhi, Yusufshāhi and Muhammadābād.‡

Subsequently the name Khalifatābād was given to a *sarkār* or district of the Mughal empire comprising nearly the whole of the north of the present district. Mān Singh is said to have given *jadgirs* in this *sarkār* to the Afghāns of Orissa after he had crushed their rebellion in 1590§; and we find it described in the *Ain-i-Akbari* as abounding in elephants and long pepper. Among the *mahāls* included in it the *Ain-i-Akbari* mentions *mahāl* Talā, with its chief town at Talā on the Kabadak and Kapilmuni near it, and then *mahāls* Sābos, Khālispur, Charulā, Rāngdiā and Salimābād (or Sulaimānābād) north of the modern Morrellganj. North-west of

* Archaeological Survey of India, Annual Report, 1903-04.

† H. Blochmann, *Geography and History of Bengal*, J.A.S.B., vol. 42, Part I, 1878 (pp. 227-28).

‡ AbduṣṢalam, *Translation of the Riāzu-s-Salatin* (Calcutta, 1904), footnotes to pp. 128-29.

§ C. Stewart, *History of Bengal*, 1847.

the latter was Haveli Khalifatābād corresponding with the modern Bāgherhāt. The north-eastern corner of the district was included in *sarkār* Sātgaon, and here the names of two *mahāls* are preserved in the modern thānas of Kalārōā and Māgura. Khalifatābād is one of the five towns in the Sundarbans entered in Van den Broucke's map of 1660, where it appears under the name of Cuiptavaz; the termination *avaz* is clearly the same as *abad*, and Cuipt is a corruption of Khalipat, *i.e.*, Khalifat, the letter *p* often being substituted in Bengali for *f*, *e.g.*, Firozpur becomes Pirojpur.*

Towards the end of the 16th century the tract now included in the district appears to have been ruled over by Pratapāditya, the Hindu hero of the Sundarbans, whose adventures have been commemorated in several works, *e.g.*, the *Udyā Sunī* by Bhārat Chandra, the *Rājā Pratapaditya Charita* by Rām Rām Basu, and an abstract of the last work by Harischandra Tarkalankār. Perhaps the most comprehensive work, however, is *Pratāpāditya* by Babu Nikhil Nath Rai, M.A., a Bengali work published at Calcutta in 1906. A Bengali play of the same name has also been written recently by Pandit Kshirod Prasad Vidyābenode, M.A.

The story of the life of Pratapāditya, as handed down by tradition, is that during the rule of Sulaimān Kararānī, king of Bengal from 1563 to 1572, one Rām Chandra, a Kayasth of Eastern Bengal, came to Gaur, with his three sons, Bhabinand, Gunānand, and Sivanand, and there obtained an appointment in the Revenue Department of the State. Sivanand, his youngest son, was eventually raised to the position of chief *kānungo*, while Sivanand's nephews, Srihari (or Sridhar) the son of Bhabānand and Jānakīballabh, the son of Gunānand, became great favourites of Dāūd Khān, who succeeded his father, Sulaimān Kararānī, as king of Bengal. By him Srihari was given the title of Rājā Bikramāditya and made chief minister, while Jānakīballabh was made his chief revenue officer under the name of Basant Rai.

Subsequently, when Dāūd Khān rebelled against the Emperor Akbar and an imperial army was marching on Gaur, Dāūd Khān fled from his kingdom after entrusting all his wealth to Bikramāditya and Basant Rai, with orders to remove it to some place of safety. The two cousins then took all they could lay their hands on to a house they had recently built on the banks of the Jamunā in the Sundarbans. So great, it is said, was the treasure thus removed that the splendour of the city of Gaur was transferred to this new settlement, which was therefore given the name of Yasohara (now corrupted to Jessore) meaning "depriving of

* H. Blochmann, *Geography and History of Bengal*, J.A.S.B., Part I, vol. XLII, 1878, p. 281.

glory." Another explanation which has been suggested is that the name means that other glorious cities compared with this city had no glory and that Yasohara is equivalent to "supremely glorious." The site of the city they founded is at Iswaripur in this district.

Not only had Bikramāditya and Basant Rai taken away with them the king's treasure, but also all the State papers. Accordingly, after the capture of Gaur in 1574, Rājā Todar Mal demanded their restitution, and they were given up by the cousins on condition that they were allowed to retain the territory in which they had settled, claiming that it had been granted to them by Dāūd Khān. For a long time thereafter Rājā Bikramāditya and Rājā Basant Rai ruled jointly over Yasohara.

Now Bikramāditya had a son, named Pratāpāditya (often abbreviated to Pratap), of whom it was predicted that he would supplant his father. Even in his early youth Pratapāditya was distinguished for his ability and prowess, and the old Rājā began to fear the fulfilment of the prediction and to suspect that the young prince would not only supplant him but also kill Basant Rai, whom the old Rājā loved more than his own son. Filled with these suspicions Bikramāditya persuaded Basant Rai, much against his will, to agree to send him to Agra. Pratāpāditya obeyed their orders, but, in his turn suspected that his uncle had contrived to remove him from Jessore merely in order to increase his own power there in the present and to secure the principality for his own children in the future. At Agra Pratāpāditya won the favour of the Emperor by his princely appearance, winning manners and ready wit, and in a short time was granted a *sannad* making him a Rājā and conferring on him his father's territory. He then returned to Yasohara and, having supplanted his father, removed the seat of government to Dhūmghāt.

For a time Pratāpāditya prospered exceedingly. He adorned his kingdom with noble buildings, made roads, built temples, dug tanks and wells, and, in fact, did everything that a sovereign could do for the welfare of his subjects. The limits of his kingdom quickly extended, for he made war on his neighbours and came off victorious in every battle till all the surrounding country acknowledged his rule. Ultimately he declared himself independent of the Emperor of Delhi, and so great was his power that he managed to defeat one after another 22 generals sent against him. All these successes he owed to the favour of the goddess Jasoreswari (Kālī), who, pleased with his zealous devotion to herself and his charity to all around him, had promised that she would aid him in every difficulty, and

never leave him till he himself drove her from his presence. Her favour was at last withdrawn, for Pratāpāditya assumed an overweening pride and became very tyrannical towards his subjects, beheading them for the least offence. The godless, anxious to revoke her blessing, one day assumed the disguise to the Rājā's daughter, and appeared before him in Court, when he was dispensing his so-called justice by ordering a sweeper woman's breast to be cut off for having presumed to sweep the palace court in his presence. Shocked at the impropriety of his daughter, as he supposed her to be, appearing before him in Court, the Rājā ordered her out and told her to leave his palace for ever. The goddess then revealed herself and told him that her former blessing and promised aid were now withdrawn, as he himself had driven her from his presence.

The downfall of Pratāpāditya soon followed. One of the last and worst acts of his reign was committed when he assassinated his uncle, Basant Rai, with all his children, except an infant who was hid in a field of *kachu* or arum plants. The infant, Raghab Rai, who, when he attained manhood, was given the name of Kachu Rai to commemorate the way in which he escaped, was taken by one Bhubanand, a *Duda* of Bikramāditya, to the imperial court. There he obtained the ear of the Emperor, who hearing how his father and brothers had been assassinated, directed Mān Singh, the Governor of Bengal (1590-1604), to crush Pratāpāditya. Mān Singh at last succeeded in defeating him, both because the goddess Jasoreswari had turned her back on him, and also because a treacherous courtier, Bhabānand Mazumdār, let the imperial army by a secret route through the Sundarbans. Mān Singh thus surprised the capital and captured Pratāpāditya, who was sent a prisoner to Delhi. But on the way, at Benares, he put an end to his life by swallowing some poison he kept concealed in a ring, rather than be paraded in an iron cage through the streets of Delhi. Bhabanand, from whom the Rājās of Krishnagar are said to be descended, obtained a *jagir* as a reward for the services he had rendered.

The traditional account of the rise and fall of Pratāpāditya is confirmed from other sources. In the *Tuhfat-i-Akbari* we find a mention of Sridhar Bengali, who is described as being a great favourite of Dāūd Khān and as having received from him the title of Rājā Bikramajit, i.e., Bikramāditya. He and Katlu Khān, who had been Governor of Orissa, conspired against Lodi Khān, the *Amir-ul-Umara* or commander-in-chief of Dāūd Khān, and had him imprisoned and put to death, for they thought that, if he were removed, the offices of Vakil and Wazir

Historical
references.

would fall to them. We also find it stated that when Dāūd Khān fled from Patna after his defeat by the Emperor Akbar in 1574, Bikramāditya placed his valuables and treasure in a boat and followed him.* Pratāpāditya has been identified as the king of Chandecan, which was visited in 1598 by Frances Fernandez and his companion Dominic De Josa, the first Jesuits to visit Bengal. Fernandez describes Chandecan as lying half way between Porto Grande (Chittagong) and Porto Piccolo (probably Bandel), and says that the king's dominions were so extensive that it would take 15 or 20 days to traverse them. His description points to the Sundarbans, for he says that the country had a great trade in bees'-wax, which was produced in the jungles, that the country was infested by dacoits, and that he and his companion encountered great dangers both from them and from tigers on the way to Chandecan†. Again, the family records of the Rājās of Chāndrā or Jessore state that the founder of the family, Bhabeswar Rai, was given a grant of *parganas* Saiyadpur, Anudpur, Mundagacha and Mullikpur as a reward for his services against Pratāpāditya. This grant was made by one of Akbar's generals, Azam Khān, or as he was called after he had been appointed Viceroy of Bengal in 1582, Khān Azam. It would appear, therefore, that though Pratāpāditya gained victories over the imperial armies and succeeded in eluding their attempts to capture him, he lost part of his territory before he was finally reduced. It is probable, moreover, that his victories were gained over small expeditions, for the Mughal armies were busy in endeavouring to quell the more serious risings of the Afghāns.

Jesuit
accounts.

The identification of Chandecan mentioned above with the capital of Pratāpāditya is due to the researches of Mr. H. Beveridge, who writes as follows in an article *Were the Sundarbans inhabited in ancient times?* published in the Journal of the Asiatic Society of Bengal, Vol. XLV, Part I, 1876. "By far the most interesting account of the Sundarbans is contained in the letters of the Jesuit priests who visited Baklā‡ and Jessore in 1599 and 1600. Their letters were published by Nicholas Pimenta and have been translated into Latin and French. I was indebted for my introduction to them to my friend Dr. Wise, who told me that they were quoted in Purchas' *Pilgrimage*. Extracts from the letters and the subsequent history of the mission are also

* Sir H. Elliot, *History of India* (1873) vol. V, pp. 373, 378.

† H. Beveridge, *History of Bakerganj*, (p. 446) Appendix C VIII, *Francis Fernandez*.

‡ Baklā was a *Sarkār* comprising portions of the present Backergunge and Dacca districts.

given by Pierre du Jarric in his *Histoire des choses plus memorables advenues aux Indes Orientales*, Bordeaux, 1608-14.

"It appears that Pimenta, who was a Jesuit visitor and stationed at Goa, sent two priests, Fernandez and Josa, to Bengal in 1598. They left Cochín on 3rd May, 1598, and arrived in 18 days at the Little Port (Porto Pequino). From thence they went up the river to Gullo or Geli,* where they arrived eight days after leaving the "Little Port." While at Gullo, they were invited by the Rājā of a place called Chandecan (an Italian Ciandecan) to pay him a visit, and accordingly Fernandez sent Josa there, and he was favourably received by the king. One year after these two priests had left Cochín, Pimenta sent two other priests, viz., Melchín de Fonseca and Andrew Bowes, to Bengal, and they arrived at Chittagong or at Diangut some time in 1599. On 22nd December, 1599, Fernandez wrote from Sripur, giving an account to Pimenta of the success of the mission, and on 20th January, 1600, Fonseca wrote from Chandecan giving an account of a journey which he had made from Dianga to Chandecan by way of Baklā. Fonseca's letter is most interesting. He described how he came to Bacola, and how well the king received him, and how he gave him letters patent, authorising him to establish churches, etc., throughout his dominions. He says that the king of Baklā was not above eight years of age, but that he had a discretion surpassing his years. The king "after compliments" asked me where I was bound for, and I replied that I was going to the king of Ciandecan, who is to be the father-in-law of your Highness. These last words seem to be very important, for the king of Ciandecan was, as I shall afterwards show, no other than the famous Pratāpāditya of Jessore, and therefore this boy-king of Baklā must have been Rām Chandra Rai, who we know married Pratāpāditya's daughter."

Fonseca then proceeds to describe the route from Baklā to Chandecan, regarding which Mr. Beveridge writes—"Though the good father evidently had an eye for natural scenery and was delighted with the woods and rivers, it is evident that what he admired so much must have appeared to many to be "horrid jungle," and was very like what the Sundarbans now are. In fact, a great part of this description of the route from Baklā to Ciandecan is still applicable to the journey from Barisal to Kāliganj, near which Pratāpāditya's capital was situated. The chief difference is that the progress of civilization has driven away the herds

* Gullo is identified by Mr. Beveridge with Baudel.

† Dianga has been identified by Professor Blochmann with Dakbindanga on the Ranen river south of Chittagong.

of deer and monkeys from the ordinary routes, though they are still to be found in the woods and the deer have given their name to one of the largest of the Sundarban rivers (the Haringhāta). The faithfulness of Fonseca's description seems indicated by his modestly admitting that he had never seen a rhinoceros, while stating quite truly) that there were such animals in the forest. Had he come upon any town on his route, it is reasonable to suppose that he would have mentioned it.

"Fonseca arrived at Chandean on the 20th November, and there he found Fernandez's companion Dominic de Josa, who must either have been left there by Fernandez in 1598, or had returned some time afterwards. The king received Fonseca with great kindness, so much so, that he says he does not think a Christian prince could have behaved better. A church was built at Chandean, and this was the first ever erected in Bengal, and was as such dedicated to Jesus Christ. Chittagong was the second, and then came the church at Bandel, which was erected by a Portuguese named Villalobos. The fair prospects of the mission as described by Fernandez and Fonseca were soon overclouded. Fernandez died in November 1602 in prison at Chittagong, after he had been shamefully ill-used and deprived of the sight of an eye, the king of Chandean proved a traitor, and killed Carvalho the Portuguese commander, and drove out the Jesuit priests.

"Leaving these matters, however, for the present, let us first answer the question, where was Chandean? I reply that it is identical with Pratāpaditya's capital of Dhūmghāt, and that it was situated near the modern Kidgaur. My reasons for this view are first that Chandean or Chandean is evidently the same as Chānd Khān, and we know from the History of Rājā Pratāpaditya by Rām Rām Basu (modernized by Harish Tarkalankar) that this was the old name of the property in the Sundarbans, which Pratāpaditya's father Vikramaditya got from king Daūd. Chānd Khān, we are told, had died without heirs, and so Bikramaditya got the property. And there is nothing in this contradictory to the fact that Jessore formerly belonged to Khānja Ali (Khān Jaban); for Khānja Ali died in 1459, or about 120 years before Vikramaditya came to Jessore, so that the latter must have succeeded to some descendant of Khānja Ali, and he may very well have borne the name of Chānd Khān. When the Jesuit priests visited Chandean, Pratāpaditya cannot have been very long on the throne, and therefore the old name of the locality (Chānd Khān) may still have clung to it. But besides this, Du Jarrio tells us that after Fernandez had been killed at

Chittagong in 1602, the Jesuit priests went to Sondip, but they soon left it and went with Carvalho the Portuguese commander to Ciandecan. The king of Ciandecan promised to befriend them, but in fact he was determined to kill Carvalho, and thereby make friends with the king of Arakan, who was then very powerful and had already taken possession of the kingdom of Baklā. The king therefore sent for Carvalho to "Jasor," and there had him murdered. The news reached Ciandecan, says Du Jarrie, at midnight, and this perhaps may give us some idea of the distance of the two places.

"I do not think that I need add any thing to these remarks except that I had omitted to mention that Fernandez visited Ciandecan in October, 1599, and got letters patent from the king. As an additional precaution, Fernandez obtained permission from the king to have these letters also signed by the king's son, who was then a boy of 12 years of age. The boy may have been Udayaditya, and so he must have been only 3 or 4 years older than Ram Chandra Rai of Baklā."

The visit of Jesuits to the capital of Pratāpāditya was also mentioned by Purchas, who wrote—"The king of Chandican (which lyeth at the mouth of the Ganges) caused a Jesuit to rehearse the Decalogue . . . This king and the others of Bacola and Aracan have admitted the Jesuit into their countries."

According to tradition, Pratāpāditya was one of the Bārah Bhuiyās (or Bhuyas), the twelve chiefs who held the south and east of Bengal towards the close of the 16th century. Local patriotism, indeed, claims that Pratāpāditya overcame all the other Bhuiyas and had undisputed pre-eminence, but precedence should probably be given to Isa Khān Masnad-i-Āli of Khizrpur. The latter is described by Abul Fazl as the Marzbān-i-Bhāti or governor of the low-lying land near the sea and as the ruler over twelve great zamindars, while Ralph Fitch who visited Sunargaon in 1586 says that "the chief king of all these countries is called Isacan, and he is the chief of all the other kings." Apart from this question, there seems no doubt that Pratāpāditya was one of the most powerful of the Bārah Bhuiyās, who, from occasional references in the works of Muhammadan historians supplemented by tradition, appear to have been nominally vassals of the Emperor but practically independent.

The researches of Dr. Wise have thrown further light on these rulers and have shewn that their power was well attested by early European travellers and missionaries. Jarrie, who derived his information from the Jesuit fathers sent to Bengal in 1599, says that the "prefects" of the twelve kingdoms governed by the

THE
BARAH
BHUYAS.

have his rent, and they were plundered in order that the zamindār's servants might become rich. The zamindārs, who performed all their police duties on contract, kept up the most wretchedly inefficient establishments for the purpose; and dacoits and robbers plied their profession with vigour, finding little hindrance from the police, and often in league with them, and even with the zamindar himself or his higher officers. Complaint against wrong was useless; the zamindār or his officer had it entirely in his own option whether he would listen to it or not; and the complainant had very little chance of relief, for the oppressor was often the zamindār's servant, and the plunderer, even if they took the trouble to trace him, would not find it difficult to make friends with his captors."

**MAOR
RAIDS.**

In common with other sea-board districts Khulnā appears to have suffered during the Mughal rule from the depredations of Arakanese (Magh) and Portuguese (Firinghi) pirates, whose galleys swept the sea-face of the Sundarbans and ravaged the villages along the estuaries. To such an extent were these depredations carried on that in Rennell's map a note is entered that the portion of the Sundarbans lying in Backergunge had been depopulated by the "Muggs." A vivid account of the ravages of the Portuguese corsair has been left by Bernier, who writes — "The King of Rakan, who lived in perpetual dread of the Mogol, kept these foreigners, as a species of advanced guard, for the protection of his frontier, permitting them to occupy a seaport called Chatigon, and making them grants of land. As they were unawed and unrestrained by the government, it was not surprising that these renegades pursued no other trade than that of rapine and piracy. They scoured the neighbouring seas in light galleys, called galliasses, entered the numerous arms and branches of the Ganges, ravaged the islands of Lower Bengale, and, often penetrating forty or fifty leagues up the country, surprised and carried away the entire population of villages on market days, and at times when the inhabitants were assembled for the celebration of a marriage or some other festival. The marauders made slaves of their unhappy captives, and burnt whatever could not be removed. It is owing to these repeated depredations that we see so many fine islands at the mouth of the Ganges, formerly thickly peopled, now entirely deserted by human beings, and become the desolate lairs of tigers and other wild beasts." Elsewhere he writes:—"Several of the islands, nearest to the sea, are now abandoned by the inhabitants, who

were exposed to the attacks and ravages of the Arracan pirates. At present they are a dreary waste, wherein no living creature is seen except antelopes, hogs and wild fowls, that attract tigers, which sometimes swim from one island to another."

Khulnā cannot have escaped, for a Muhammadan historian, Shihāb-ud-din Tālish, mentions Jessore and Hooghly as places they plundered, and their route would have been through this district. Writing in the latter half of the 17th century, he describes their piratical raids as follows. "From the reign of the Emperor Akbar, when Bengal was annexed to the Mughal empire, to the time of the conquest of Chātgaon during the viceroyalty of Shaista Khan, Arakan pirates, both Magh and Firinghi, used constantly to come by the water-route and plunder Bengal. They carried off the Hindus and Muslims, male and female, great and small, few and many, that they could seize, pierced the palms of their hands, passed thin canes through the holes, and threw them one above another under the deck of their ships. In the same manner as grain is flung to fowl, every morn and evening, they threw down from above uncooked rice to the captives as food. On their return to their homes, they employed the few hard-lived captives that survived, with great disgrace and insult, in tillage and other hard tasks, according to their power. Others were sold to the Dutch, English and French merchants at the ports of the Deccan. Sometimes they brought the captives for sale at a high price to Tanluk and the port of Baleswar, which is a part of the imperial dominions and a dependency of the province of Orissa. Only the Firinghi pirates sold their prisoners. But the Maghs employed all their captives in agriculture and other kinds of service. Muslims underwent such oppression in this region of war (*dar-ul-harb*) as they had not to suffer in Europe."*

The *diwāni*, i.e., the revenue or fiscal administration of Bengal was transferred to the East India Company in 1765, but it was not until 1781, when a court was opened at Murli near the town of Jessore, that British administration was fully established in the district. The jurisdiction of the *Adalat*, as this court was called, extended over the present districts of Khulnā, Jessore and Faridpur, and the first Judge and Magistrate was Mr. Tilman Henckell, whose administration made a permanent mark upon the district. "His acquaintance," writes Sir James Westland, "with every subject affecting his

EARLY
BRITISH
ADMINIS-
TRATION.†

* Jadunāth Sarkar, *The Feringi Pirates of Chātgaon*, J.A.S.B., June, 1907.

† This account of early British administration has been compiled from Sir James Westland's Report on the District of Jessore.

district was most intimate; and no wrong was too remote for his energy to grapple with, no advantage too distant for him to strive after. The idea of his administration was that it was the duty of Government to procure the peace and comfort of the mass of the inhabitants, though it might involve some harm in respect of the Company's commercial interests. These views were a little too advanced for his age, for there was then too great an inclination on the part of Government officials to look upon the natives as born only to be a means of profit to the Company. Mr. Henckell was never unmindful of his employers' mercantile interests, but he always set this before him as his duty—to guard the then almost helpless natives from the oppressions to which they were subjected by the commercial officers of the Company as well as by their own zamindars."

Sundar-
bans recla-
mation.

Soon after his appointment Mr. Henckell turned his attention to the Sundarbans and there inaugurated a system of reclamation, which after many vicissitudes has converted large tracts of forest into immense rice fields. Two objects were aimed at—to gain a revenue from lands then utterly unproductive, and to obtain a reserve of rice against seasons of famine, the crops in the Sundarbans being practically immune from drought. To ensure these objects, Mr. Henckell submitted in 1784 a proposal that grants of jungle land in the Sundarbans should be settled on favourable terms with people undertaking to cultivate them, his aim being to introduce a body of independent peasant proprietors holding directly under Government. Another part of his scheme was the establishment of a convict colony, by giving small grants of land to convicts with the exception of the most heinous offenders, who were to be shipped off to sea. Mr. Henckell went so far as to apply to the surrounding districts for drafts of long term prisoners who might form the nucleus of the colony, but nothing further appears to have been done, and this part of the scheme was never carried out.

The scheme having been approved by the Board, Mr. Henckell, after roughly defining the boundaries of the Sundarbans forest, granted about 150 leases during 1785. At the same time he established three Government outposts in central positions, and placed a *gomastha* with a small establishment in charge of each, for the purpose of defining the boundaries of the Sundarbans, encouraging reclamation, preserving the peace, and assisting passengers. They were Henckellganj (named after him, and subsequently corrupted to Hingalganj) at the junction of the Jamuna with the Kalindi, in the west of his jurisdiction; Chāndkhālī on the river Kabadak, in the middle; and Kachua, at

the junction of the Baleswar and Bhairab rivers, in the east. The surrounding lands were cultivated, and the stations were at length firmly established, though at considerable expense.*

In spite of all Mr. Henckell's efforts, however, the scheme was not a success, for it was opposed by all the neighbouring zamindars, who claimed the lands cleared by the grantees, and indeed all the forest as far as the sea, but declined to give him any information about their estates that might enable him to decide the disputes. During 1786 he marked off by bamboo stakes the line which he took to be the northern limit of the Sundarbans and the southern boundary of the zamindari lands; and this strengthened the position of the lessees, but in the end the zamindars proved too strong for the new settlers. In 1792 they had all disappeared except sixteen, and in their case the character of the scheme had been modified, for the lessees developed into *talukdars*, their lands being called Henckell's *taluks*†

In connection with this scheme Mr. Henckell set up what was to practical purposes a subdivision, a Court, called by him a "cutcherry of reference," being established at Chandkhali under one of his assistants, Mr. Foster. This Court was intended for the trial of claims made by the zamindars; and Mr. Foster was also directed to give passports and collect the Government dues on wax and honey taken from the Sundarbans, and to take cognizance of civil and criminal matters arising within a radius of 30 miles from Chandkhali, except when they were of importance, when he was to refer them to Mr. Henckell. He was thus given a regular subdivisinal jurisdiction. Mr. Foster soon came into conflict with the zamindars, who had set up toll stations upon the rivers to collect money from trading boats, not even those protected by Custom House passes being allowed to go free. There were eighteen of these stations within a circuit of 11 miles from Chandkhali, so it may be imagined what a hindrance to trade they were. The Board, when they were informed of this system, passed stringent orders that in all cases in which such tolls were levied, Mr. Henckell was to insist on immediate restitution and to inflict corporal punishment on the offender on the spot where the exaction was made. The zamindars were included in this order of punishment, but if they were minors, females or incapable persons, their manager was to bear the punishment for them.

* F. E. Pargiter, *Revenue History of the Sundarbans from 1765 to 1870*, Calcutta, 1885. Sir James Westland gives the date of the establishment of these three places as 1782-83.

† F. E. Pargiter, *Revenue History of the Sundarbans from 1765 to 1870*, Calcutta, 1885.

Police
adminis-
tration.

Mr. Henckell showed similar vigour in the administration of the police. In the early days of British rule the *Faujdar*s, who had been practically military commanders, were reduced to the position of superior officers of police, with *thānādars* in charge of smaller areas under them. There were altogether four *thānas* in the district as then constituted, one being at Khulnā, or as it was called at that time Nābād (meaning the new clearance), and subordinate to these *thānas* were several outposts or *chaukis*. The *thāna* officers were paid, but the *chaukis* were worked by means of *gomdas* or informers, who received no salary and obtained their livelihood by seizing innocent persons and extorting money from them.

This system did not work well. The *Faujdar*s oppressed the people, their subordinates were in collusion with criminals, and when Mr. Henckell joined the district, there were bands of robbers 50 strong roaming about it. On his appointment, the *Faujdar*s were abolished and their functions transferred to Mr. Henckell, who proposed to station at each of the four *thānas* a *girdār* or head police officer, whose business it would be to apprehend dacoits and forward them for trial to Murli. Their subordinates were not to be informers, but imported sepoys, as local *barkandas* were apt to collude with offenders. His police were to possess more of a military than of a detective character, for the object in view was not the prosecution of minor offences, but the checking of great ones, such as dacoity and murder. When a dacoity occurred, the investigation consisted chiefly in following up the dacoits to their homes; and as they relied rather upon their strength than upon the secrecy of their proceedings, this was simply a quasi-military expedition. When the pursuing detachment reached the lair of the gang, the zamindār through his servants was expected, and usually compelled by pressure, to deliver up the men.

This system of police, which cost perhaps Rs. 800 or 850 a month, proved too expensive for the commercial ideas of the Government, which in 1782 ordered the entire abolition of the police establishment, except the force at Murli. The duties of the police were imposed on the zamindārs, who were directed to take effectual measures that no robberies, burglaries or murders were committed within their districts. They were to do their utmost to bring all offenders to justice; they were to erect *thānas* wherever the Magistrate should direct, to appoint officers for them, and to be answerable for their good conduct. Persons suffering from robbery were to be reimbursed for their losses by the zamindār of the lands where the robbers lived, or of the lands

within which the robbery was committed; and if any zamindār committed or connived at murder, or robbery, or other breach of the peace, he was to be punished with death. This system, by which the zamindārs bore the burden of the police establishment, continued in force from 1782 until 1791 or 1792, when Lord Cornwallis reformed the administration.

Special arrangements were made for the boat routes through the Sunderbans, which lay not through cultivated lands and settled villages, but through forest and uninhabited jungle, and were infested by robbers and dacoits. Their depredations at length attracted the attention of the Government, and in 1788 six guard boats were posted along the routes to patrol the rivers and escort vessels.

The system of revenue administration will be discussed in Chapter XI, and it will suffice to mention that a Collectorate was established at Jessore in 1786. Hitherto the revenue headquarters of all but the east of the district had been at Calcutta, but Mr. Henckell, pointing out the inconvenience of this arrangement, offered himself to undertake the duties of Collector without additional salary, "actuated," as he said, "by motives of public good, and the enhancement of his own credit and reputation." The Government readily accepted his offer and created a Collectorship for Jessore; it was to comprise Isafpur and Saiyadpur (which had apparently been under the Collector of Rājshahi and Bhushna), the estates lying between the Ichhāmāt and the present Backergunge district (then part of Dacca), which had previously been paying revenue at Calcutta and at Hooghly, and also some estates detached from Murshidabad. To enforce the payment of revenue, the Collector appears principally to have used strong pressure. Continual demands were made upon defaulters, and these had some weight, since the Collector had power to use harsher means. He had a defaulters' jail, in which recusants might be confined, and he might also attach and realize directly the rents of any estate.

Mr. Henckell thus united in his own person the offices of District Judge, District Magistrate and Collector, but he had no concern with the Salt Department, the jurisdiction of which extended over the south of the district. That Department was under a Mr. Ewart, who had two or three assistants, a large staff of subordinates, and a small military force, all stationed at Khulnā, which was the headquarters of the Raimangal Agency. The salt officials had established themselves in the district before any civil court had been constituted in it, and when a Judge arrived without instructions as to his relations with the salt

Revenue
adminis-
tration.

Salt De-
partment.

authorities, frequent collisions took place. The plan followed in the salt manufacture was that the Government Salt Agent contracted with certain middlemen called *malangis* for the engagement of people as salt boilers or *māhindars*. The *malangis* received large advances from the salt agents, and in their turn made advances to the *māhindars*, who engaged to proceed to specified places far south in the Sunlarbans, where they gave their personal labour in the manufacture of salt. But in most cases the *māhindars* had to be impressed and compelled by force to take the advances; and the *malangis* were vested with certain powers to enable them to drive the *māhindars* to work and to recover the advances which they had forced upon them. These powers the *malangis* cruelly abused, and gross oppressions were perpetrated by the salt officials. They insisted on receiving back Rs. 20 for every Rs. 4 which they had advanced; and when Mr. Henckell came to the district the *māhindars* appealed to him for protection. The Government Salt Agent resented interference on the part of the Judge, and there was open war between the Judge's bailiffs and the salt subordinates.

At length, in 1787, Mr. Henckell submitted proposals for the reform of the Salt Department, and to give the system a fair trial offered himself to undertake the duties of Salt Agent. The plan would, he said, have the advantage of uniting in the same individual, namely himself, the power to deal with the claims on the *māhindars* for rent, and the claims on them that arose out of salt transactions. The Governor-General, Lord Cornwallis, approved his proposals and directed him to take charge of the salt agency so far as the Raimangal division was concerned, Mr. Ewart having to confine himself to the Backergunge side. Subsequently, in December 1788, rules were issued containing all the elements of reform which Mr. Henckell had previously proposed. The salt boilers were to be free to engage or not as they liked, and the Salt Agent was made their protector instead of their slave driver. All advances, whenever possible, were to be given to them direct, as oppression was found to be generally due to the middlemen. This change was not effected without a great deal of friction. Mr. Ewart refused to give over charge of the transferred division, carried on work there as before, and objected to giving up the offices and godowns at Khulna, declaring that they were, in part at least, his own property. However, the change was at last effected and put an end for the time to the constant quarrels between the Departments.

Mr. Henckell was succeeded in 1789 by Mr. Rocks, who carried out the Permanent Settlement in this district and Jessore.

He apparently began his service in Jessore in 1781 as Registrar under Mr. Henckell, and when he succeeded him in his office, he continued his policy. "In fact," writes Sir James Westland, "the fruits of Mr. Henckell's administration are for a long time visible in the history of the district; and it is certain that its early records derive great interest from the fact that it was two such men as Henckell and Locke, who were at the head of affairs during the time which intervened between its first establishment in 1781 and the completion of Lord Cornwallis' reforms, which by 1793 had changed the first crude attempts at district government for a system substantially the same as that which ever since has prevailed."

The subsequent history of the district is mainly that of the development of the Sundarbans.* In 1810 Captain Robertson surveyed the main water routes from Calcutta as far as Noakhali, and in 1811 survey operations were taken in hand, the Sundarbans, exclusive of the sea-face, being surveyed by Lieutenant W. E. Morrieson during the years 1811-14, his results being corrected by his brother Captain Hugh Morrieson in 1818; the latter died at Jessore of jungle fever, contracted while surveying in this unhealthy tract. This great work, carried out in spite of many dangers and difficulties, has been the basis of all subsequent maps of the Sundarbans. To Lieutenant Morrieson, moreover, is due the cut known as Morrieson's cut, which opened out a new route for trade. Finding in the course of his survey that the north-east branch of the Raimangal estuary approached to within a very short distance of the Kalindi, he made a cut joining the two rivers. But the opening of this channel had an unexpected result. At that time cultivation extended further south on the east bank of the Kalindi than on the west, and as the stream of the Kālinḍī very soon enlarged the cut, a large quantity of its fresh water was diverted into the Raimangal, and a considerable tract, being deprived of its supply, reverted into jungle.

The advantages that the State might gain from the opening up of the Sundarbans were now clearly perceived, and in 1814 the Court of Directors directed that settlements should be concluded with the actual occupiers for the lands already brought under cultivation, while holding out reasonable encouragement

* This account of the administration of the Sundarbans has been compiled from the *Revenue History of the Sundarbans from 1765 to 1870* (Calcutta, 1885) and an article *Census of Indian Districts—The Sundarbans*, also written by Mr. Pargiter, published in the *Calcutta Review*, October, 1889.